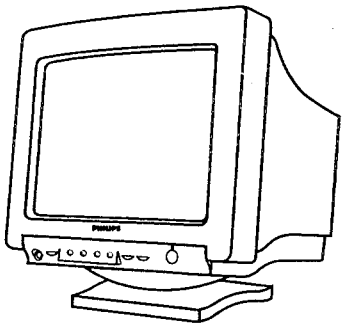
17" AUTO SCAN Colour Monitor — Chassis

Service
Service
Service

CM3800



EPA POLLUTION PREVENTER

Service Manual

Horizontal frequencies
30 to 82 kHz

Contents

			Page	
1.	Technical data		2	
2.	Connection facilities		3	
3.	Control locations and Functions		4	
4.	Adjustment Via On-Screen-Display		5	
5.	Warning and notes		7	
6.	Mechanical instructions		8	
7.	Wiring diagram		9	
8.	Alignment locations		10	
9.	Electrical instructions		11	
	Electrical diagrams and PWB layout		*Diagram*	*PWB*
	Block diagram		13	
	Video and Input terminal panel	(Diagram A)	14	16
	Main panel	(Diagram B)	17	20
	Main power panel	(Diagram C)	21	20
	Power saving panel	(Diagram D)	22	22
	Multi video panel	(Diagram E)	23	23
	EPA panel	(Diagram F)	24	24
10.	Repair tips		25	
11.	Explode view		26	
12.	Spare parts list		27	

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PHILIPS

PCS 80 209

1. Technical data

General
- Mains voltage : AC 90-264 V
- Mains frequency : 50-60 Hz
- Power consumption : 100 W (typical)
  : 110 W (max.)
- Operating temperature : 0 °C to 40 °C
- Weigh : 22 kg
- Dimension (WxHxD) : 417 x 426 x 446 mm

Picture tube
- Size : 17 inch
- Light transmission : 42 - 57 %
- Deflection angle : 90 degrees
- EHT voltage : 25 +/- 0.3 kVolt
- Pitch : 0.28 mm
- Phosphor : EBU or equivalent, medium short

Video
- Dot rate : 167 MHz
- Video signal : 0.7 Vpp linear/75 ohm
- Image size : 300 +/- 3 mm x 225 +/- 3 mm
- H-Shift range : Total 20 +/- 5 mm min
- V-Shift range : Total 10 +/- 2 mm min

Sync. signal
- Sync. polarity : Positive or Negative
- Vertical frequency : 50-160 Hz
- Horizontal frequency : 30-82 kHz

Image geometry
- Total geometrical distortion of the image (pincushion and barrel distance) : 3.0 mm max.
- Horizontal tilt (rotation) : <= 2.5 mm max.
- Image non-linearity (according IEC 107-73,74) : 5 % max. horizontal, 5 % max. vertical

Power Management

Power Management Definition						
VESA DPMS				Power Saving Status		
Mode	Video	H-Sync	V-Sync	Power Used	Power Saving	LED color
ON	Active	Yes	Yes	Normal	0 %	Green
Stand-by	Blanked	No	Yes	< 15 Watts	> 85 %	Yellow
Suspend	Blanked	Yes	No	< 15 Watts	> 85 %	Yellow
OFF	Blanked	No	No	< 5 Watts	> 95 %	Amber

Note: The video will be blanked and the power LED color will change into following colors whenever the monitor goes into power management status.

This monitor is Energy Star compliant and TCO '92 power management when used with a computer equipped with DPMS.
PHILIPS is a partner in the EPA's Energy Star Computer Program.

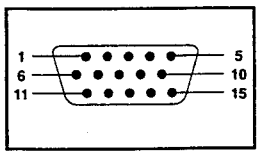
Resolution modes and sync. polarities

Mode ID	Mode	Resolution dots x line	Horizontal Freq. (kHz)	Vertical Freq. (Hz)	Sync. polarity H	Sync. polarity V
M01	VGA	640 x 400	31.5	70	-	+
M02	VGA	640 x 480	31.5	60	-	-
M03	MAC II	640 x 480	35.0	66.7	Sync on Green	
M04	VGA	640 x 480	37.5	75	-	-
M05	SVGA	800 x 600	35.2	56	+/-	+/-
M06	SVGA	800 x 600	37.8	60	+	+
M07	SVGA	800 x 600	46.9	75	+	+
M08	QUADRA	832 x 624	49.7	75	-	-
M09	8514/A	1024 x 768	35.5	87	+	+
M10	EVGA	1024 x 768	56.6	70	+/-	+/-
M11	Apple 19"	1024 x 768	60.0	75	-	-
M12	VESA	1024 x 768	60.0	75	+	+
M13	Apple 21"	1152 x 870	68.7	75	+/-	+/-
M14		1280 x 1024	64.0	60	Sync on Green	
M15	VESA/75	1280 x 1024	80.0	75	+	+
M16		1600 x 1280	79.2	60	+/-	+/-

2. Connection facilities

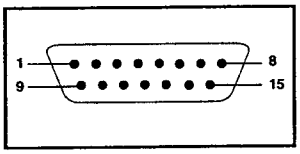
Pin assignment 15p 'D' shell (3 and 2 rows)

1. The 15 pin D-sub connector (male) of the signal cable (IBM system):



Pin No.	Assignment	Pin No.	Assignment
1	Red video input	8	Blue video ground
2	Green video input	9	No pin
3	Blue video input	10	Logic ground
4	Identical output connect to pin 10	11	Identical output connect to pin 10
5	Ground	12	Serial data line (SDA)
6	Red video ground	13	H. sync / H+V
7	Green video ground	14	V. sync (VCLK for DDC)
		15	Data clock line (SCL)

2. The 15 pin D-sub connector (male) of the adapter (Apple Macintosh system):



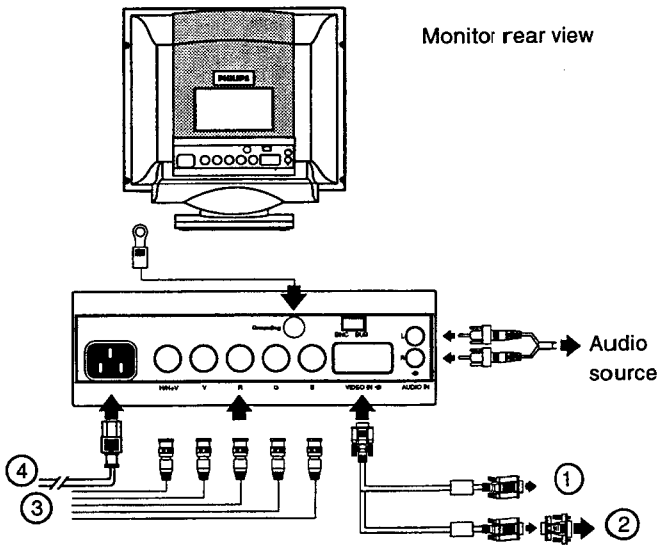
Pin No.	Assignment	Pin No.	Assignment
1	Red ground	9	Blue video
2	Red Video	10	Sense 2
3	Composite sync,H+V	11	Composite sync &
4	Sense 0		V. sync ground
5	Green video	12	V. sync
6	Green ground	13	Blue video ground
7	Sense 1	14	H. sync ground
8	Not connected	15	H. sync

Connection

Important: Please make sure the AC power to your computer is "OFF" before connecting or disconnecting any display peripheral. Failure to do so may cause serious personal injury as well as permanent damage to your computer equipments.

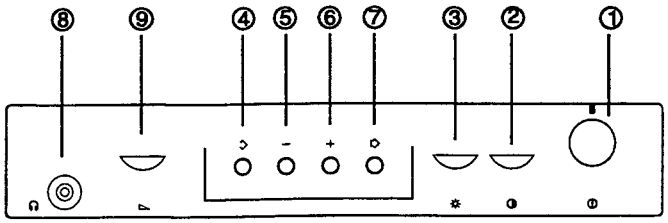
Connect the monitor to the computer using the supplied interface cables. Connection with computer system other than IBM PC or Apple computers may need different type of adapters. Please consult your computer supplier for these adapters. If you are using BNC connectors of the monitor, you need to change the input settings. Please refer to "Adjustment via On-Screen-Display" in later chapters. Connect the power cord to a wall outlet after the interface cable is properly connected.

1)IBM PC connection
2)Apples's connection
3)5 BNC connection
4)Mains connection



3. Control locations and Functions

Monitor control panel



Descriptions of knobs and keypads on front control panel

① ⏻ - Press this knob to switch ON and OFF of monitor's power

② ◑ - Adjust contrast of the display

③ ☼ - Adjust brightness of the display

④ ⟩ - Activate OSD menu
- Return to upper level or quit from OSD

⑤ – - Move highlighted icon leftwards
- Decrease value for controlled item

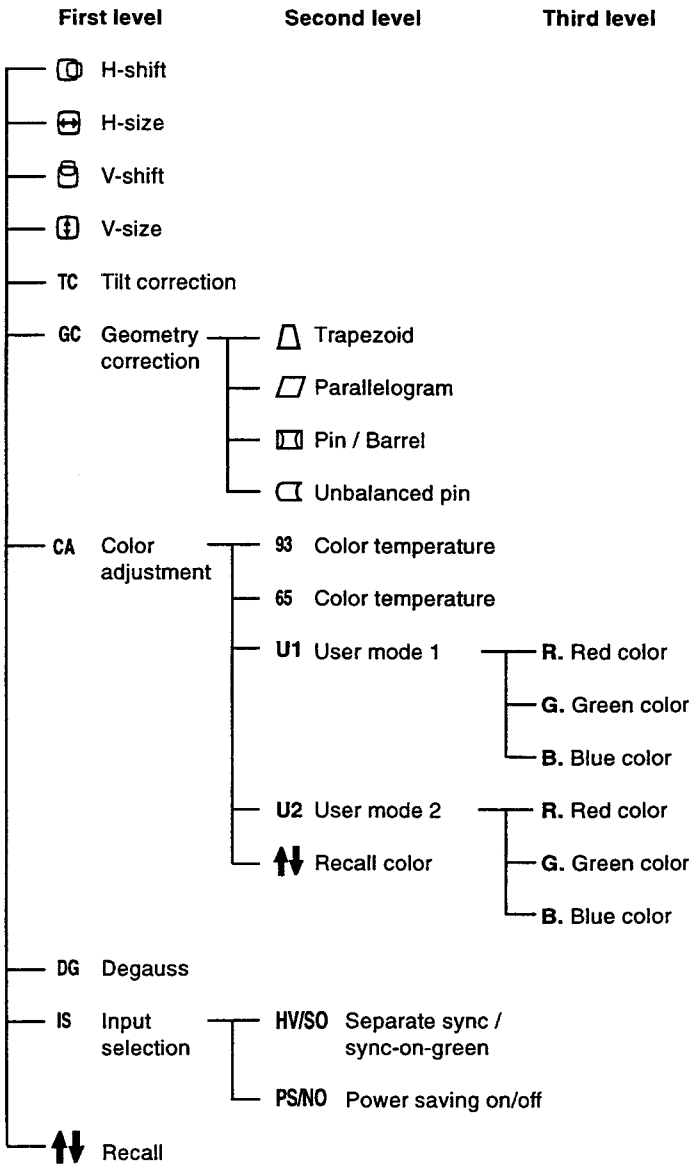
⑥ + - Move highlighted icon rightwards
- Increase value for controlled item

⑦ ⇨ - Confirm the selection on highlighted icon
- Set values for controlled item

⑧ ∩ - Connect with an earphone

⑨ ◺ - Adjust volume of internal speakers and earphone output

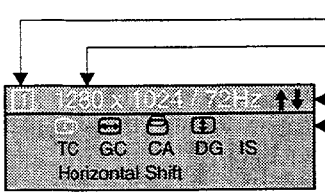
OSD menu tree structure



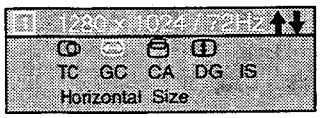
4. Adjustment Via On-Screen-Display

One example

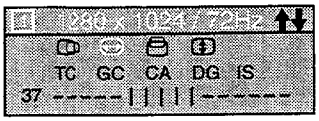
Use following steps to adjust horizontal shift (position) of the display:
- Press " ◇ ", you will see an OSD window (main menu)


- Level of the OSD menu
- Resolution and frequency of the display
- Recall function
- Adjustment functions
1280 x 1024 / 72Hz
TC GC CA DG IS
Horizontal Shift

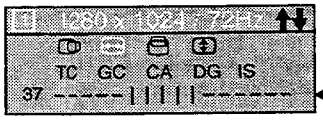
- Press + or - to place highlighted (yellow) icon on



- Press " ◇ ", a scale presented on the bottom of OSD window.



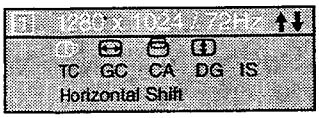
- Press + or - to adjustment the horizontal size of the display. The scale in OSD window shows the controllable range.



- The magnitude value of scale bar will be decreased or increased according to the adjustment.

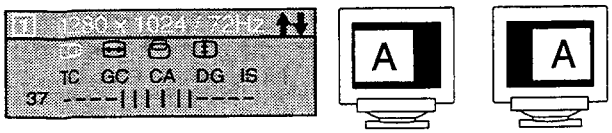
- When the display has been adjusted to an appropriated position, press " ◇ " once to go to back to first level of OSD menu. Press " ◇ " once again to exit from OSD. The adjusted parameters are automatically saved.

Adjustment function

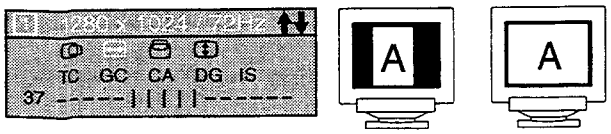


- Press " ◇ " to activate OSD menu.
- Press +, - to move the highlight to the icon function you want to adjust.
- Press " ◇ " to confirm the selection.
- You can press " ◇ " to return to the previous adjustment result without any confirmation.
- Press +, - to adjust the selected function.
- Press " ◇ " to confirm the adjustment.
- Press " ◇ " to exit and save.

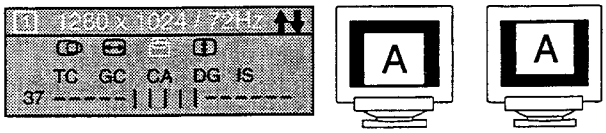
Horizontal shift



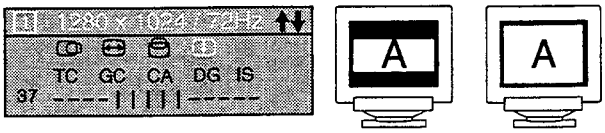
Horizontal size



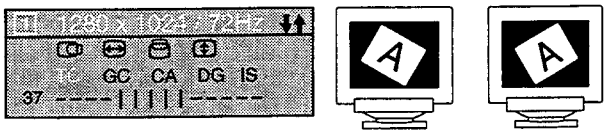
Vertical shift



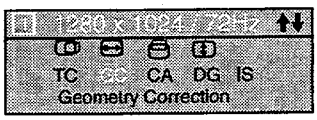
Vertical size



Tilt correction (optional) TC

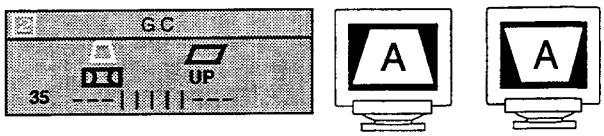


Geometry correction GC

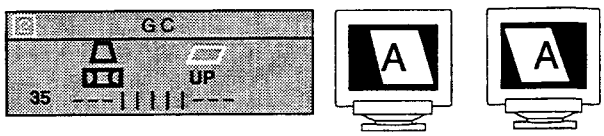


- Press " ◇ " to activate OSD menu.
- Press +, - to select **"GC"**.
- Press " ◇ " to enter to 2nd level of OSD menu (geometry correction sub-menu).
- Press +, - to select pin / barrel or trapezoid.
- Press " ◇ " to confirm the selection. You can press " ◇ " to return the preious adjustment result without any confirmation.
- Press +, - to adjust.
- Press " ◇ " to confirm the adjustment
- Press " ◇ " to go back and save the setting.

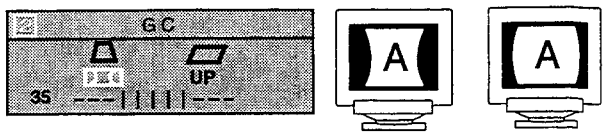
Trapezoid



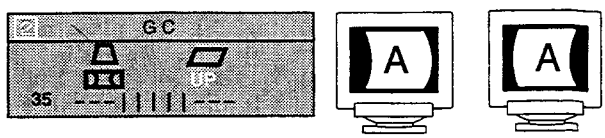
Parallelogram



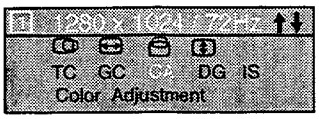
Pincushion / barrel



Unbalanced Pin UP

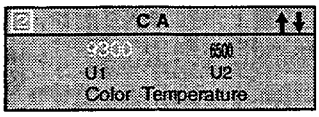


Color adjustment CA



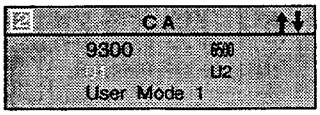
- Press " ◇ " to activate OSD menu.
- Press +, - to place highlighted icon on **"CA"**.
- Press " ▷ " to confirm the selection and enter to the 2nd level of OSD menu (color adjustment sub-menu).

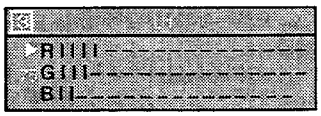
9300 K or 6500 K color temperature



- In color adjustment sub-menu, press +, - to place the highlighted icon on **"93"** or **"65"**.
- Press " ▷ " to confirm the color temperature setting.

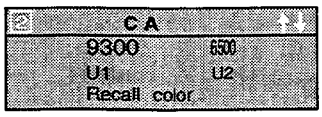
Customized color setting (user's mode 1 and 2)





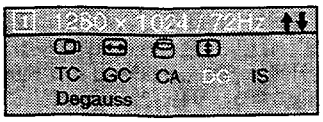
- In color adjustment sub-menu, press +, - to place the highlighted icon on **U1** or **U2**.
- Press " ▷ " to confirm the selection.
- Press +, - to select **"R"** (red), **"G"** (green), or **"B"** (blue) of color components you want to adjust.
- Press " ▷ " to confirm the selection.
- You can press " ◇ " to return to the previous adjustment result without any confirmation.
- Press +, - to adjust the color component you just selected.
- Press " ◇ " to confirm the adjustment.
- Repeat the above procedures to adjust other color component, until the color of the display matches your application.
- Press " ◇ " 3 times to quit & save.

Recall of color presettings



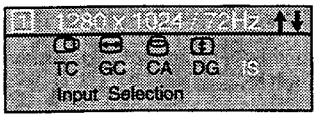
- In color adjustment sub-menu, press +, - to place the highlighted icon on " ↑↓ ".
- Press " ▷ " to confirm the recall function.
- When performing this recall function, all color adjustments will be restored by factory presettings.

Degaussing DG



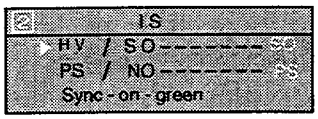
- Press " ◇ " to activate OSD menu.
- Press +, - to place highlighted icon on **"DG"**.
- Press " ▷ " to perform degaussing.

Input selection IS



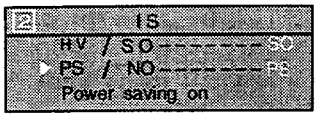
- Press " ◇ " to activate OSD menu.
- Press +, - to place highlighted icon on "IS".
- Press " ▷ " to confirm the selection and enter to the 2nd level of OSD menu (input selection sub-menu).
- Press +, - to select the item you want to change.
- Press " ▷ " to confirm the selection.
- Press +, - to change the settings.
- Press " ◇ " 2 times to quit and save.

Separate / composite sync or sync-on-green



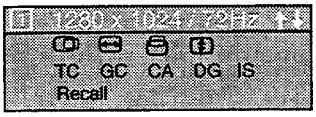
- Check sync type of your computer video output. Most of the **IBM** compatible PCs use separate sync. But if you have sync-on-green in your video output, choose SO.

(2) Enable / disable power saving



- You can enable or disable automatic power saving function (described in the following chapter). Default setting is "enable". You can choose disable if you don't want the monitor to automatically reduce its power consumption.
- If you select "NO", you can only disable power saving function on current mode.

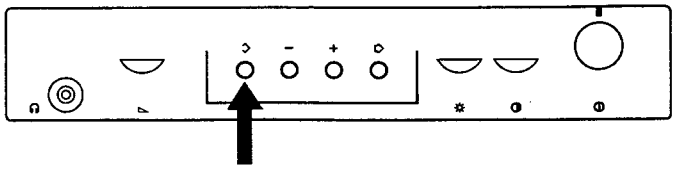
Recall of geometry parameters ↑↓



- In the first level of OSD menu, Press +, - to place highlighted icon on "↑↓ " (on the upper-right corner of OSD window).
- Press " ▷ " to perform recall function. in this case the horizontal shift, horizontal size, vertical shift, vertical size, image rotation, geometry correction, and input selection of current mode are restored by factory preset parameters.

What if you get lost in OSD tree structure ?

You can press " ◇ " to go back to upper level of OSD menu until quitting from OSD. In this case the current adjustment will not be saved but all previous adjustments you have made will be properly saved.



5. Warning and notes

1. Safety Instructions for Repairs

1.1 Safety regulations require that during a repair:
- The set should be connected to the main via an isolating transformer.
- Safety components, indicated by the symbol ⚠, should be replaced by components identical to the original ones.
- When replacing the CRT, safety goggles must be worn.

1.2 Safety regulations require also that after a repair:
- The set should be returned in its original condition.
- The cabinet should be checked for defects to avoid touching, by the customer, of inner parts.
- The insulation of the mains lead should be checked for external damage.
- The mains lead strain relief should be checked on its function.
- The cableform and EHT cable are routed correctly and fixed with the mounted cable clamps in order to avoid touching of the CRT, hot components or heat sinks.
- The electrical resistance between mains plug and the secondary side is checked. This check can be done as follows:
  * Unplug the mains cord and connect a wire between the two pins of the main plug.
  * Switch on the monitor with the main switch.
  * Switch off the monitor and remove the wire between the two pins of the mains plug.
  * Thermally loaded solder joints should be resoldered. this includes components like LOT, the line output transistor, fly-back capacitor.

2. Maintenance Instructions

It is recommended to have a maintenance inspection carried out periodically by a qualified service employee. The interval depends on the usage conditions.
- When the set is used In a living room the recommended interval is 3 to 5 years. When the set is used in the kitchen or garage this interval is 1 year.
- During the maintenance inspection the above mentioned "safety instructions for repair" should be carried out The power supply and deflection circuitry on the chassis, the CRT panel and the neck of the CRT should be cleaned.

3. Warning

3.1 In order to prevent damage to ICs and transistors, all high-voltage flash-overs must be avoided. In order to prevent damage to the picture tube, it should be discharged using the method shown in Fig 5.1. Use a high-voltage probe and a multimeter (position DC-V). Discharge until the meter reading is OV (after approx 30s).

3. 2 ESD ⚠
All ICs and many other semiconductors are sensitive to electrostatic discharges (ESD). Careless handling during repair can drastically shorten their life. Make sure that during repair you are connected by a pulse band with resistance to the same potential as the earth of the unit. Keep components and tools also at this same potential

3.3 Be careful when taking measurements in the high-voltage section and on the picture tube.

3.4 Never replace modules or other components while the unit is switched on.

3.5 When making settings, use plastic rather than metal tools. This will prevent any short circuits and the danger of a circuit becoming unstable.

3.6 After repair the wiring should be fastened once more in the cable clamps for this purpose.

3.7 In order to prevent measuring errors, the heat sinks should not be used as reference points for measurements.

3.8 Together with the deflection unit and any multipole unit the flat square picture tubes used form an integrated unit. The deflection and the multipole units are set repair is therefore not recommended.

3.9 The high-voltage cable in 21" units is glued in the line output transformer. This can therefore not be replaced.

4. Notes

4.1 The picture tube has been adapted printed spark gaps. Each spark gap is connected between an electrode of the picture tube and the Aquadag coating.

4.2 The semiconductors indicated in the circuit diagram(s) and in the parts lists are completely interchangeable per position with the semiconductors in the unit, irrespective of the type indication on these semiconductors.

4.3 The connectors used for the modules (board to board) are gold-plated and should only be replaced by the same type.

4.4 In the case of fault finding and/or repair to the teletext module, the accessibility of the circuit and the components can be increased by using extension cards. The order numbers of these extension cards are:

* 6 times: 4822 395 30259
* 8 times: 4822 214 31402

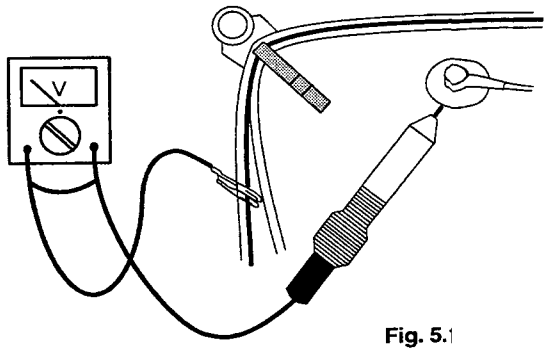


Fig. 5.1

6. Mechanical Instructions

1. Location of the Panels (see Fig. 6.1)

1.1 Deflection + Supply panel
1.2 Video panel
1.3 Power saving panel

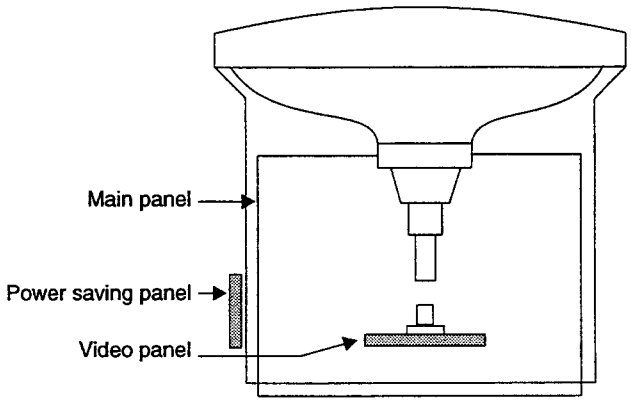


Fig. 6.1

2. General

To be able to perform measurements and repairs on the "circuit boards", these unit should placed in the service position first:
- Remove back cover (6 screws),see fig. 6.2.
- Remove meshy matal shielding (10 screws)

Video panel
- Remove the metal shielding by desolder 13 joints.

Power saving panel
- Remove the power saving panel (click construction)
- Slide out the panel from plastic slots.

3. Main panel

- Remove the video panel from CRT.
- Disconnect the desired cable trees.
- Remove 8 screws.
- Slide out the metal shield first.
- Remove 3 screws, see Fig. 6.1.
- Remove two sides matal shielding (4 screws)
- Slide the main panel out of bottom plate.
- Place Main panel in service position as shown in Fig.6.3.

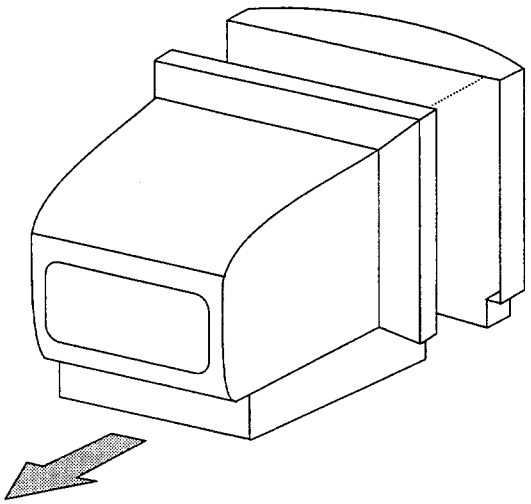


Fig. 6.2

4. Remark

4.1 extension cables are required for the service position of the Main panel.

- 4822 321 61698 2p to 2p cable to degaussing coil.

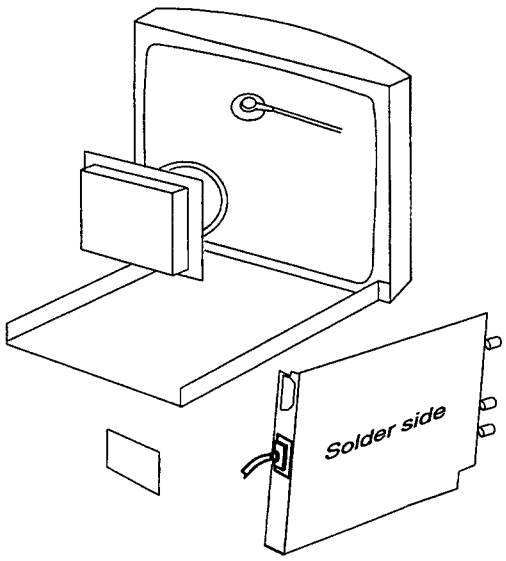
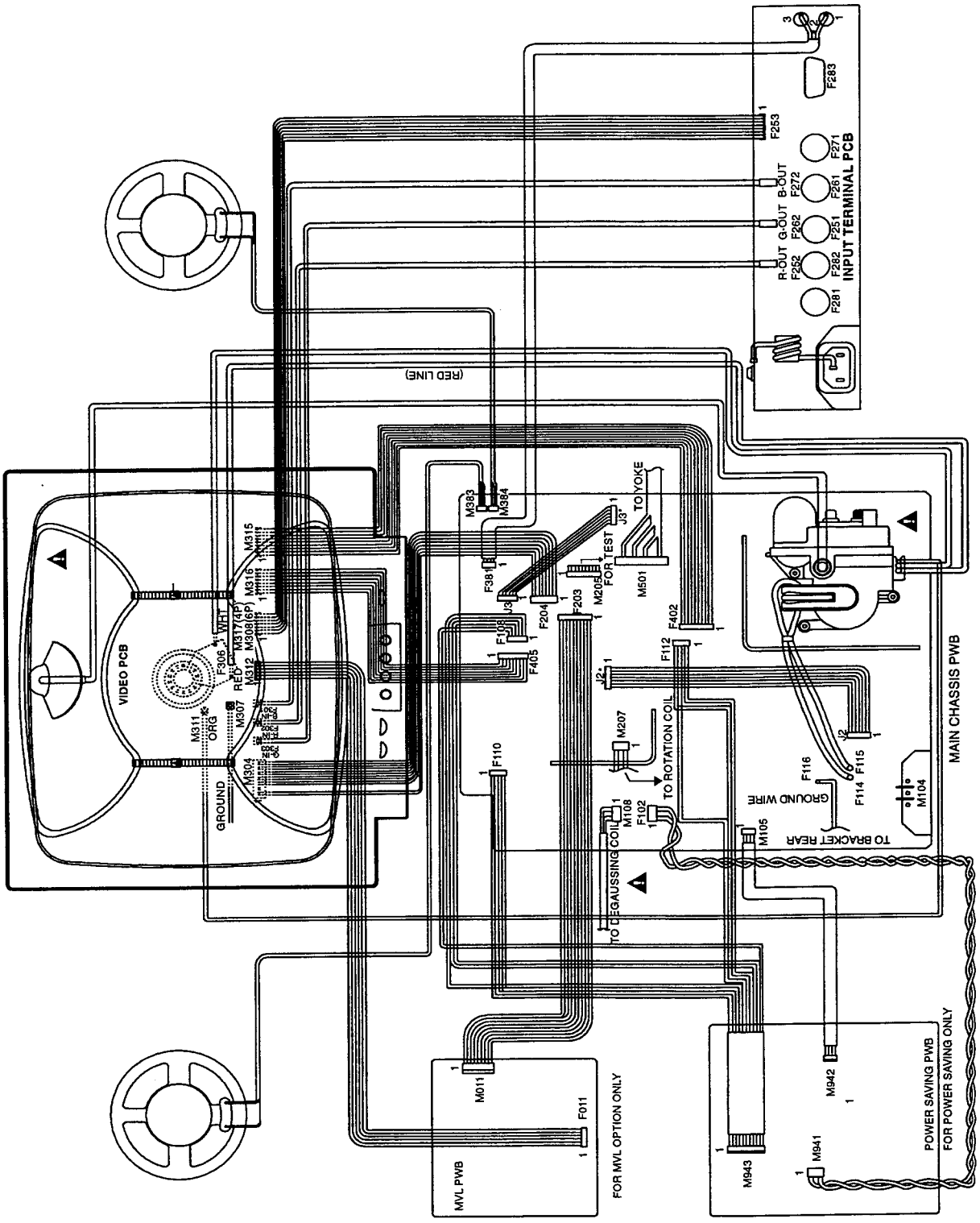


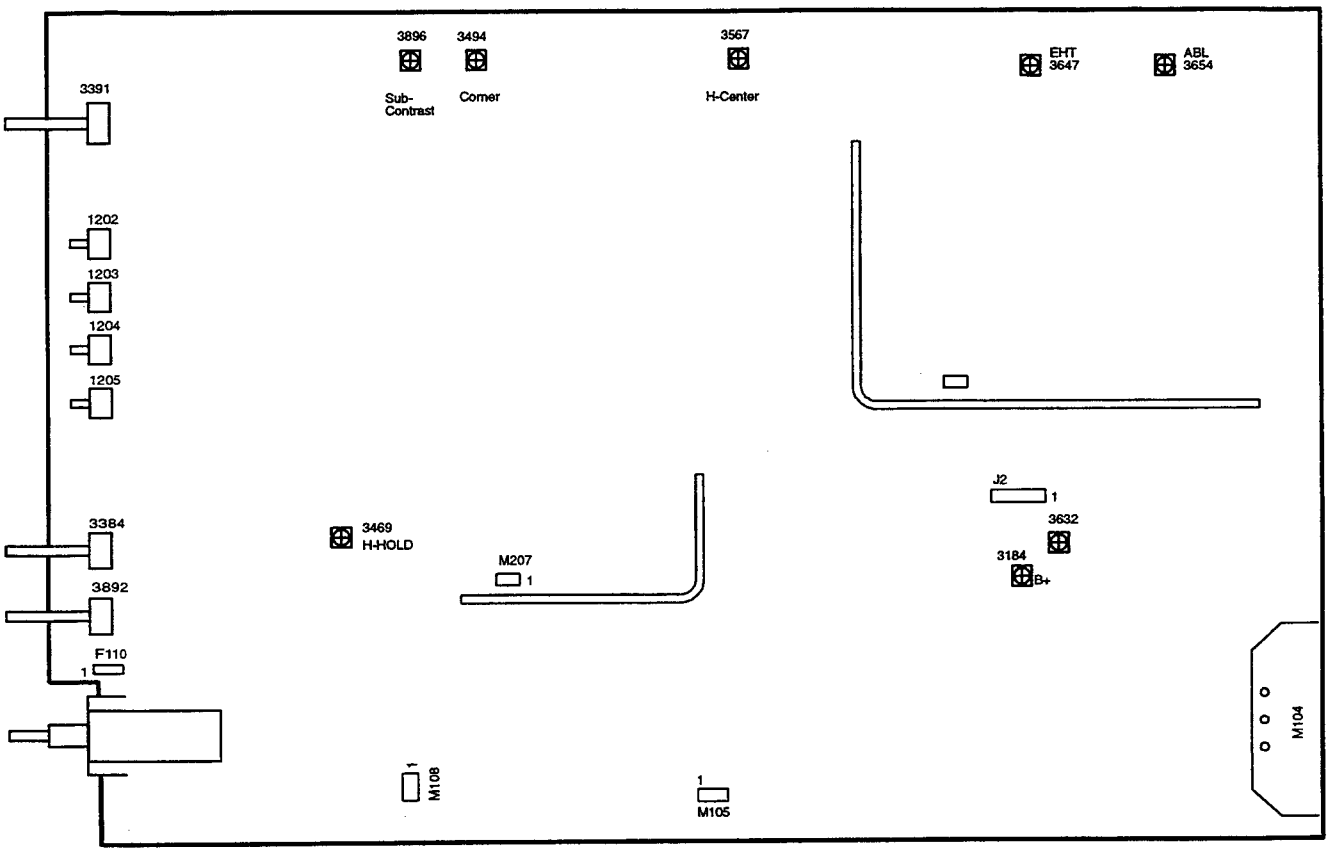
Fig. 6.3

7. Wiring diagram

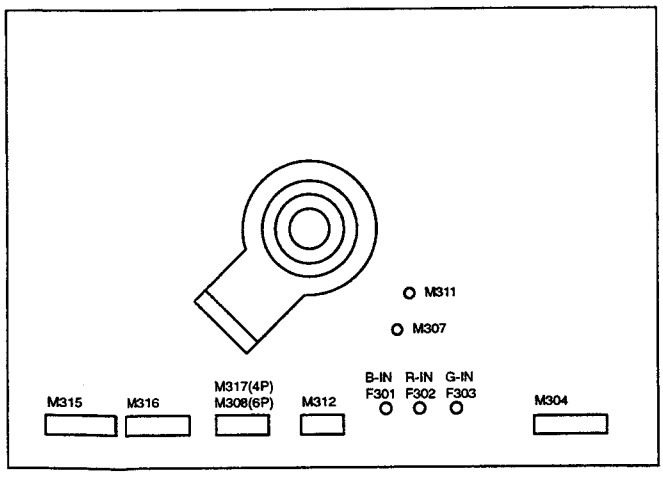


8. Alignment locations

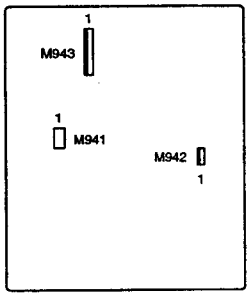
MAIN BOARD



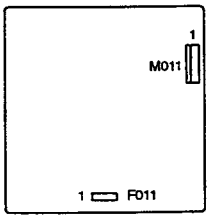
VIDEO BOARD



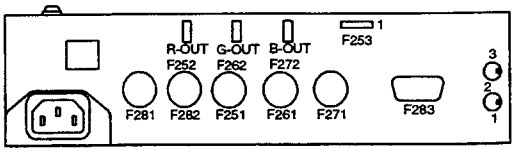
POWER SAVING



MVL PWB (OPTION)



INPUT TERMINAL



9. Electrical Instructions

0. General

When carry-out the electrical settings in many cases a video signal must be applied to the monitor. A computer with :

- ATI VGA 1024 V6-1.04/PH BETA 4 interface card
- PGA1024 (4822 212 30916)
- PGA1280 (4822 212 30917)

are used as the video signal source. The signal patterns are selected from the "service test software" package, see user guide 4822 727 19896 (ATI1024), or 4822 727 20273 (PGA 1280).

0.1With ATI VGA1024 card:
- Installation instruction for the ATI1024 interface card.
- Place the monitor (if possible) in east-west direction.
- Place the ATI interface card into the computer.
- Select the "vsetup" file from the "utility disk" belonging to the card.
- Select "8 bits" or "16 bits" rom operation depending on your computer type.
- Select "analog monitor"
- Select the monitor type from video ROM BIOS.
- Select "MAGNAVOX CM5000" for the resolutions:

640 x 350 31.5 kHz/70 Hz
640 x 400 31.5 kHz/70 Hz
640 x 480 31.5 kHz/60 Hz
640 x 480 37.8 kHz/60 Hz
800 x 600 35.2 kHz/56 Hz
800 x 600 37.8 KHz/60 Hz
800 x 600 48.0 kHz/72 Hz
1024 x 768 35.5 kHz/87 Hz
1024 x 768 48.4 kHz/60 Hz
1024 x 768 56.0 kHz/70 Hz

- Reboot your computer again.
- Put the floppy disk containing the service test software package in the computer and select the test pattern indicated for the service setting.

0.2 With normal VGA card:
If not using the ATI card during repair or alignment, The service engineer also can use this service test software adapting with normal standard VGA adaptor and using standard VGA mode 640 x 480, 31.5 kHz/60 Hz (only) as signal source.

0.3 AC/DC Measurement:
The measurements for AC waveform and DC figure is based on 1024 x 768 56 kHz/70 Hz resolution mode with test pattern "gray scale".

1. B+ supply voltage (3184)

- Apply a video signal in the 1024 * 768 with 56 kHz/70Hz mode.
- Select the "cross-hatch" pattern.
- Set the brightness front control 3384 and the contrast front control 3892 to the minimum position.
- Pre-set trimming potentiometer 3184 in mid-position.
- Connect a dc voltmeter between the joint of capacitor 2121 (on power supply) and ground (common ground).
- Short the wafer f946 (short pin on power saving board).
- Set the B+ trimming potentiometer 3125 so that the reading on the dc voltmeter is 190 V +/- 0.5 Vdc.

2. Horizontal synchronisation (3469)

- Apply a video signal in the 1024 * 768 with 56 kHz/70Hz mode.
- Select the "cross-hatch" pattern.
- Connect a dc voltmeter between pin3 of 7401 and ground.
- Set the trimmimg pot-meter 3469 untill the reading of dc voltmeter is 3.75 Vdc.

3. High-voltage EHT (3647,3632 divide frequency)

- Apply a video signal in the 1024 * 768 with 56 kHz/70 Hz mode.
- Select the "cross-hatch" pattern.
- Set the H-width control at minimum position (OSD scale reach to 0).
- Set the brightness front control 3384 and the contrast front control 3892 to the minimum position.
- Turn off the power.
- Connect a "high-voltage voltmeter" between the high-voltage connection of the picture tube and earth.
- Turn on the power.
- Set the EHT trimming potentiometer 3647 so that the "high-voltage voltmeter" reads 25.0 kV +/- 0.3 kV.
- Turn off the power.
- Remove the "high-voltage voltmeter" from the picture tube.
- Turn on the power again.
- Connect a dc voltmeter at pin6 of 7311 and ground.
- Adjust 3632 to obtain 7.18 voltages.

4. Horizontal raster centering (3567)

- Set H-shift front control (OSD) at center position.
- Apply a video signal (e.g. crosshatch) in the 1024 * 768 with 56 kHz/70 Hz mode.
- Adjust pot-meter 3567 for the correct horizontal center of the whole raster.

5. Focus setting

- Apply a video signal in the 1024 * 768 with 56 kHz/70 Hz mode.
- Select the "@" pattern.
- Set the brightness front control 3384 to mid-position and contrast front control 3892 to maximum position.
- Adjust focus pot-meters (top of LOT) F1 for horizontal focus and F2 for vertical focus so that the picture at 2/3 of the diagonal lines (from center to four corners) of the displayed screen is as sharp as possible.

6. Adjustment of cut-off (OSD control)

- VG2 setting (screen, bottom on the LOT).
- Set the contrast front control 3892 to minmum position.
- Set the brightness front control 3384 to center mechanical position.
  * Apply a video signal in the 1024 * 768 with 56 kHz/70 Hz mode.
  * Select the full white pattern.
- Set VG2 pot-meter (screen) to minimum.
- Using VG2 setting knob, incressing VG2 voltage until any color amoung red, green, blue becomes "just visible".
- By "service mode" of front panel **OSD control** to adjust rgb cut off (see section 10.0.)
- Adjust r, g, b cut off to the "two remaining" colors to the same light output level, so that an optimal background (raster) color is obtained.

- Remark: color temperature (Gamma=2.7)

9300 K:	X=0.281 +/- 0.02	Rx=0.625 Ry=0.340
	Y=0.311 +/- 0.02	Gx=0.285 Gy=0.605
		Bx=0.150 By=0.065
6500 K :	X=0.313 +/- 0.02	
	Y=0.329 +/- 0.02	

7. White "D" (OSD control)

- Set the contrast front control 3892 to the maximum position.
- Set the brightness front control 3384 to center mechanical position.
- By using 1st. level of OSD front control to adjust RGB gain so that an optimal display color (White "D") is obtained.

8. Picture geometry setting (factory pre-set modes)

- Set brightness front control 3384 and the contrast front control 3892 in the mechanical central position.
- Apply a video signal with cross-hatch pattern.
- Apply a video signal in the 1280 * 1024 with 64 kHz/60 Hz mode.

8.1 Horizontal geometry (OSD control)
- Adjust the H-width to 288 mm.(only for 64k/60hz and 80k/75hz) for others mode should be 300mm.
- Adjust the H-phase to center position.

8.2 Vertical geometry (OSD control)
- Adjust vertical size to 230 mm (only for 64k/60hz and 80k/75hz) for others mode should be 225 mm).
- Adjust V-phase to center position.

8.3 Pincushion-barrel distortion (OSD control)
- Adjust the pincushion-barrel to straight vertical lines of the left and right edge.

8.4 Trapezium distortion (OSD control)
- Adjust the trapezium to get optimal vertical line.

8.5 Picture tilt correction (OSD control)
- Adjust picture vertical tilt is less than +/- 0.5 mm.

8.6 Parallelogram distortion (OSD control)
- Adjust parallelogram to get optimal vertical line.

8.7 Unbalance pincushion distortion (OSD control)
- Adjust unbalance-pincushion to get optimal vertical line.

8.8 Store the preset result by pressing the store Key " ◇ "
- Repeat the procedure 9 to 9.6 until all the preset timing has been adjusted completely.

8.9 High order correction (3494)
- Adjust 3494 to get optimal vertical line.

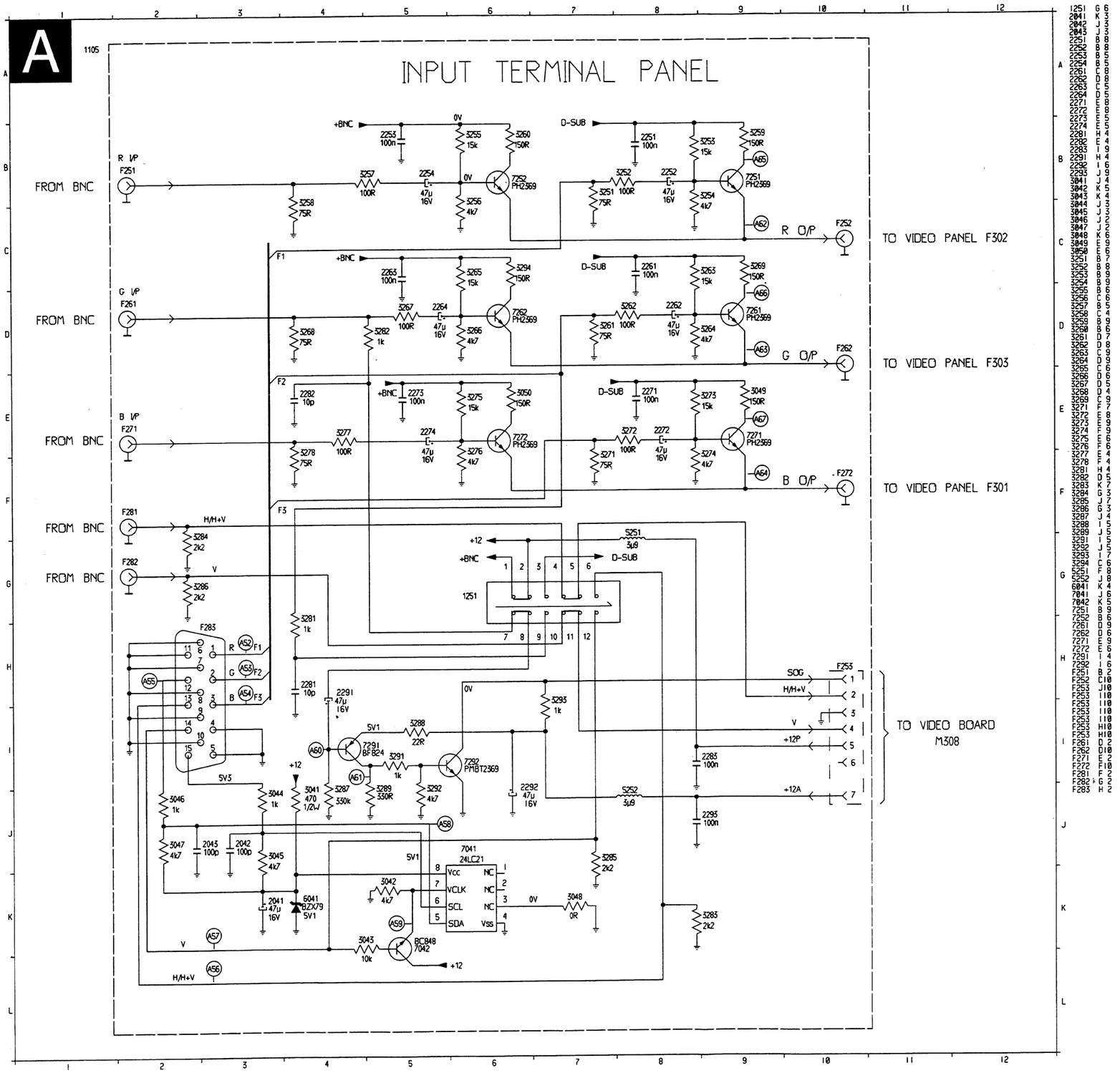
9. Service mode for cut-off adjustment

- Press keys of " ◇ ", " - ", " + " at the same time.
- Select adjustment items by pressing " ◇ " key. "Cu" means cut-off, and "Ga" means gain.
- Confirm adjustment item by pressing " - " and " + " at the same time. Color of level characters will change from yellow to red.
- Adjust " - " or " + " for the optimal condition.
- Press " - " or " + " at the same time again to disable alignment function. Color of level characters will return to yellow.
- Press key of " ◇ ", " - ", " + " at the same time again to quit cut off (or gain) adjustment of service mode.

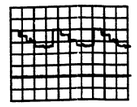
10. Factory pre-set mode change

* Warning : Unless with accuracy signal equipment, customer is not recommended to do this adjustomer.

- Press keys of " - ", " + ", " ◇ " at the same time, factory mode "factory adj" will be shown on screen, it's under adjustment of factory mode.
- Press " ◇ " key to enable adjustment menu (same as user mode).
- the operations of adjustment are same as user mode.
- Press " ◇ " key to quit menu screen, and data will be saved automatically.
- Press keys of " - ", " + ", " ◇ " at the same time again to quit factory adjustment mode.



A1 F301



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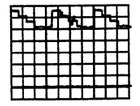
A9 7701-9



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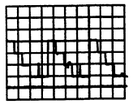
A17 7716-E



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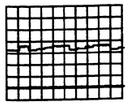
A25 7731-C



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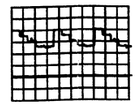
A2 F302



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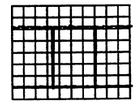
A10 7701-14



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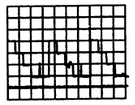
A18 7726-E



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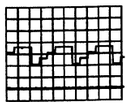

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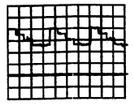
A3 F303



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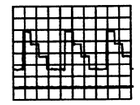
A11 7701-17



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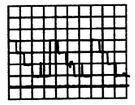

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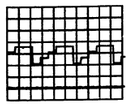

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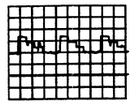
A4 7717-E



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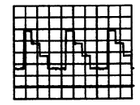
A12 7701-20



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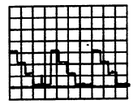

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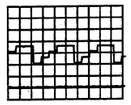

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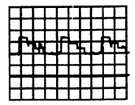
A5 7727-E



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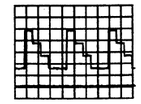
A13 7701-26



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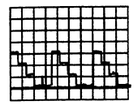
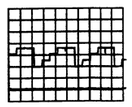
5us/div

A21 7721-E



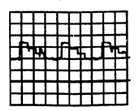
1V/div AC
5us/div

A29 5711-2



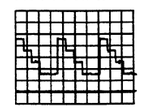
20V/div AC
5us/div

A6 7737-E



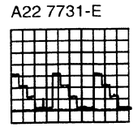
0.5V/div AC
5us/div

A14 7716-B



1V/div AC
5us/div

A22 7731-E



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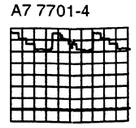
5us/div

A30 5711-1

20V/div AC
5us/div

A7 7701-4



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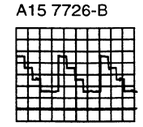
A15 7726-B



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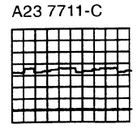
5us/div

A23 7711-C

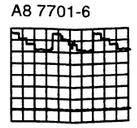


2V/div AC
5us/div

A31 5721-2

20V/div AC
5us/div

A8 7701-6



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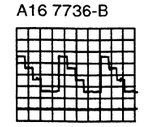
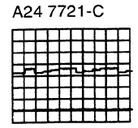
5us/div

A16 7736-B



1V/div AC
5us/div

A24 7721-C



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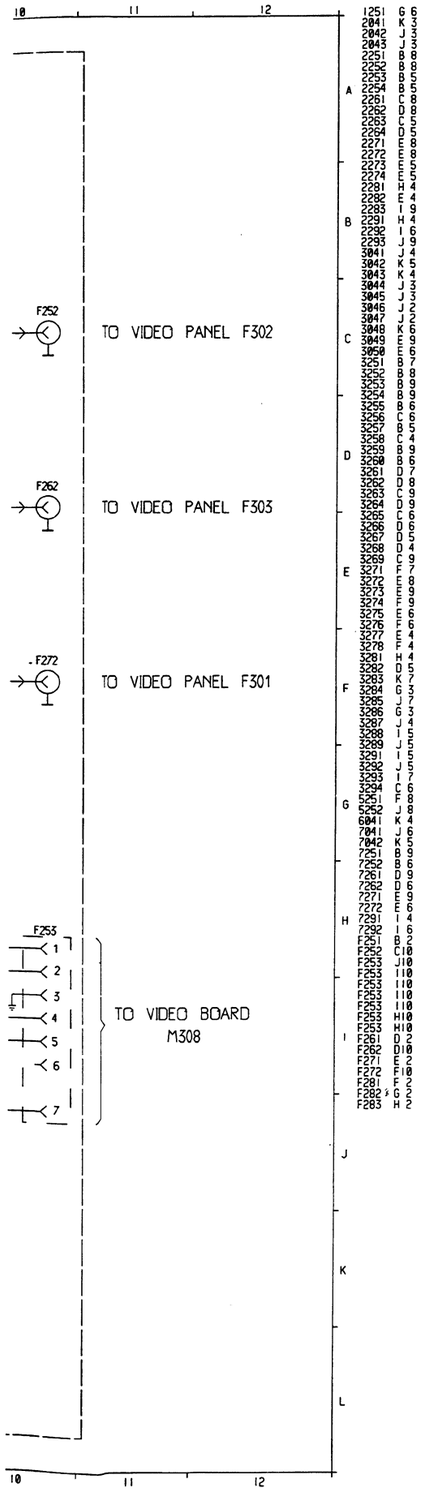
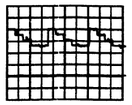
5us/div

A32 5721-1

20V/div AC
5us/div



A1 F301

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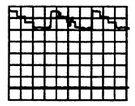
5us/div

A9 7701-9

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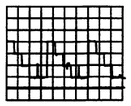
A17 7716-E

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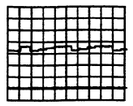
5us/div

A25 7731-C

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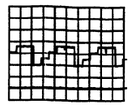
5us/div

A33 5731-2

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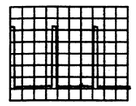
5us/div

A41 7831-2

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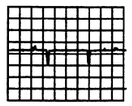
A49 7841-3

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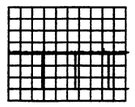
A57 F283-14

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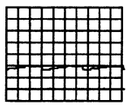
A65 7251-C

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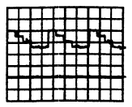
A2 F302

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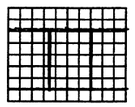
A10 7701-14

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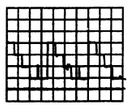
A18 7726-E

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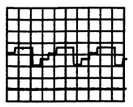
A26 7713-C

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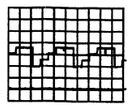
5us/div

A34 5731-1

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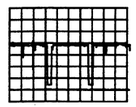
5us/div

A42 7835-B

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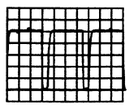
5us/div

A50 7841-5

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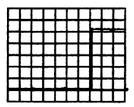
5us/div

A58 7041-5

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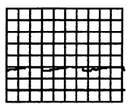
5ms/div

A66 7261-C

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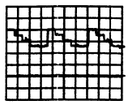
5us/div

A3 F303

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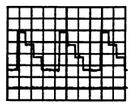
5us/div

A11 7701-17

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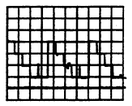
5us/div

A19 7736-E

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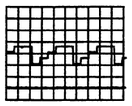
5us/div

A27 7723-C

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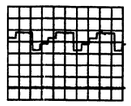
5us/div

A35 F306-11

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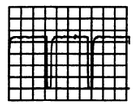
5us/div

A43 7831-3

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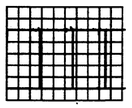
A51 7841-10

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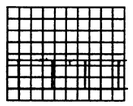
5ms/div

A59 7041-7

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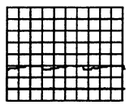
A67 7271-C

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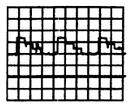
A4 7717-E

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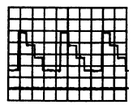
A12 7701-20

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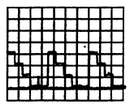
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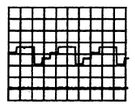
A28 7733-C

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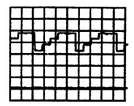
A36 F306-8

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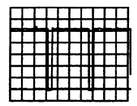
A44 7831-4

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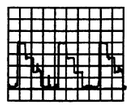
5us/div

A52 F283-1

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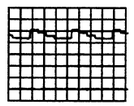
A60 7291-B

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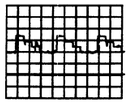
A5 7727-E

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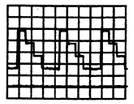
A13 7701-26

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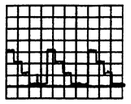
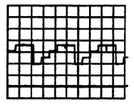
5us/div

A21 7721-E

1V/div AC
5us/div

A29 5711-2

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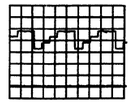
5us/div

A37 F306-6

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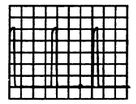
5us/div

A45 7831-10

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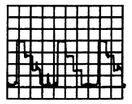
5us/div

A53 F283-2

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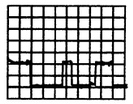
5us/div

A61 7291-C

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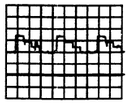
A6 7737-E

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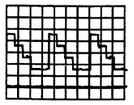
5us/div

A14 7716-B

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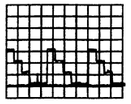
A22 7731-E

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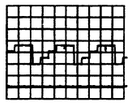
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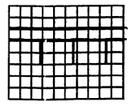
A38 F306-5

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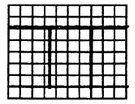
A46 7831-11

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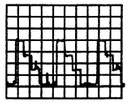
5us/div

A54 F286-3

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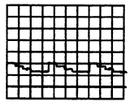
5us/div

A62 7252-E

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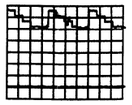
5us/div

A7 7701-4

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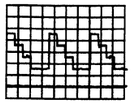
5us/div

A15 7726-B

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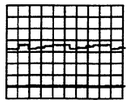
A23 7711-C

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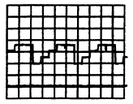
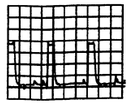
5us/div

A31 5721-2

20V/div AC
5us/div

A39 7844-B

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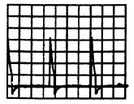
5us/div

A47 7831-12

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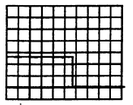
5us/div

A55 F283-12

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5ms/div

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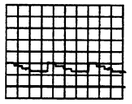
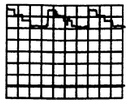

1V/div AC
5us/div

A8 7701-6

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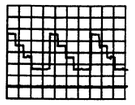
5us/div

A16 7736-B

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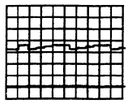
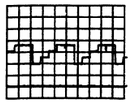
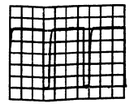
5us/div

A24 7721-C

2V/div AC
5us/div

A32 5721-1

20V/div AC
5us/div

A40 7844-C

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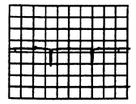
5us/div

A48 7841-2

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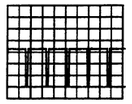
5us/div

A56 F283-13

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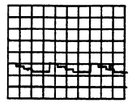
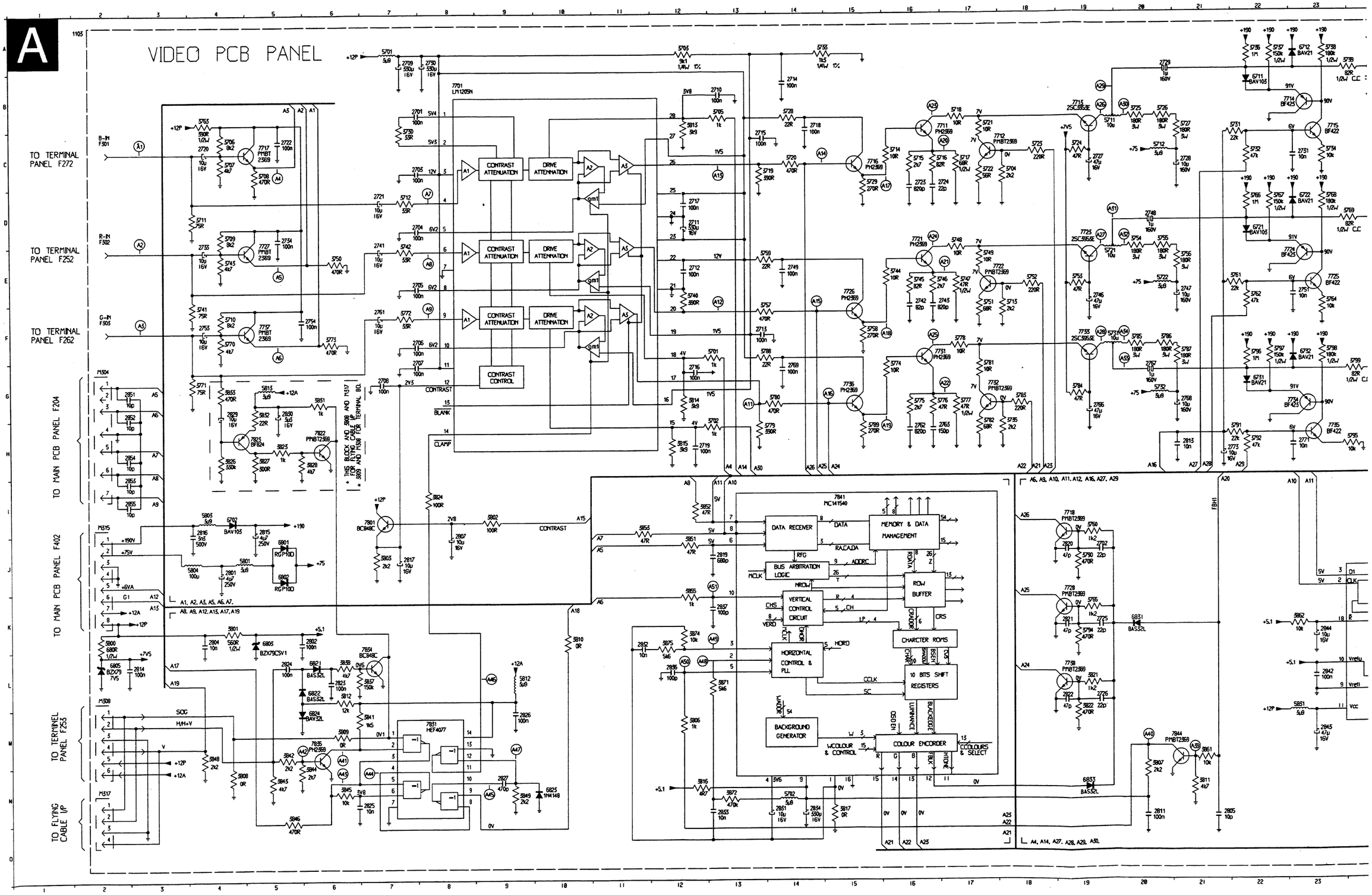
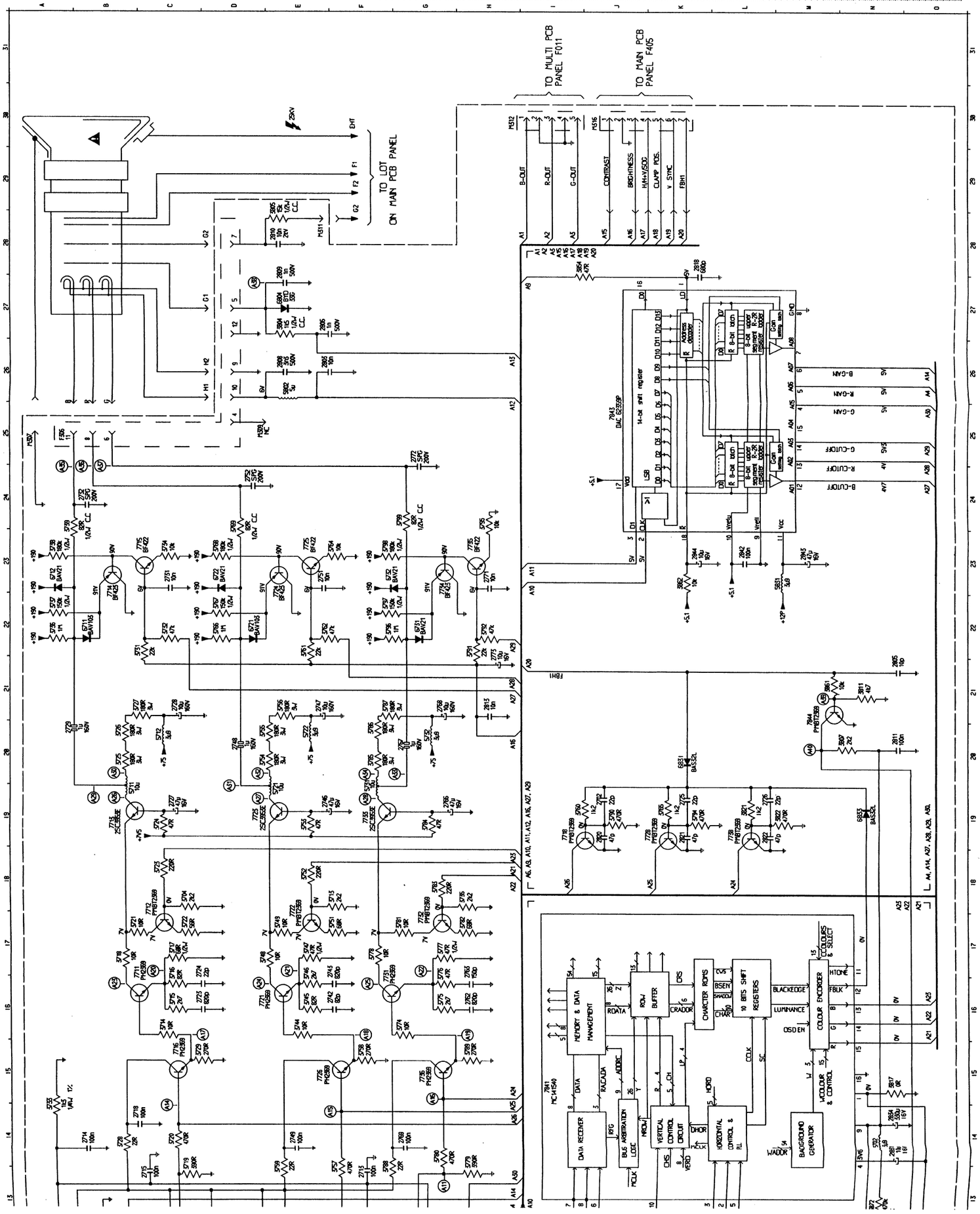
A64 7272-E

1V/div AC
5us/div

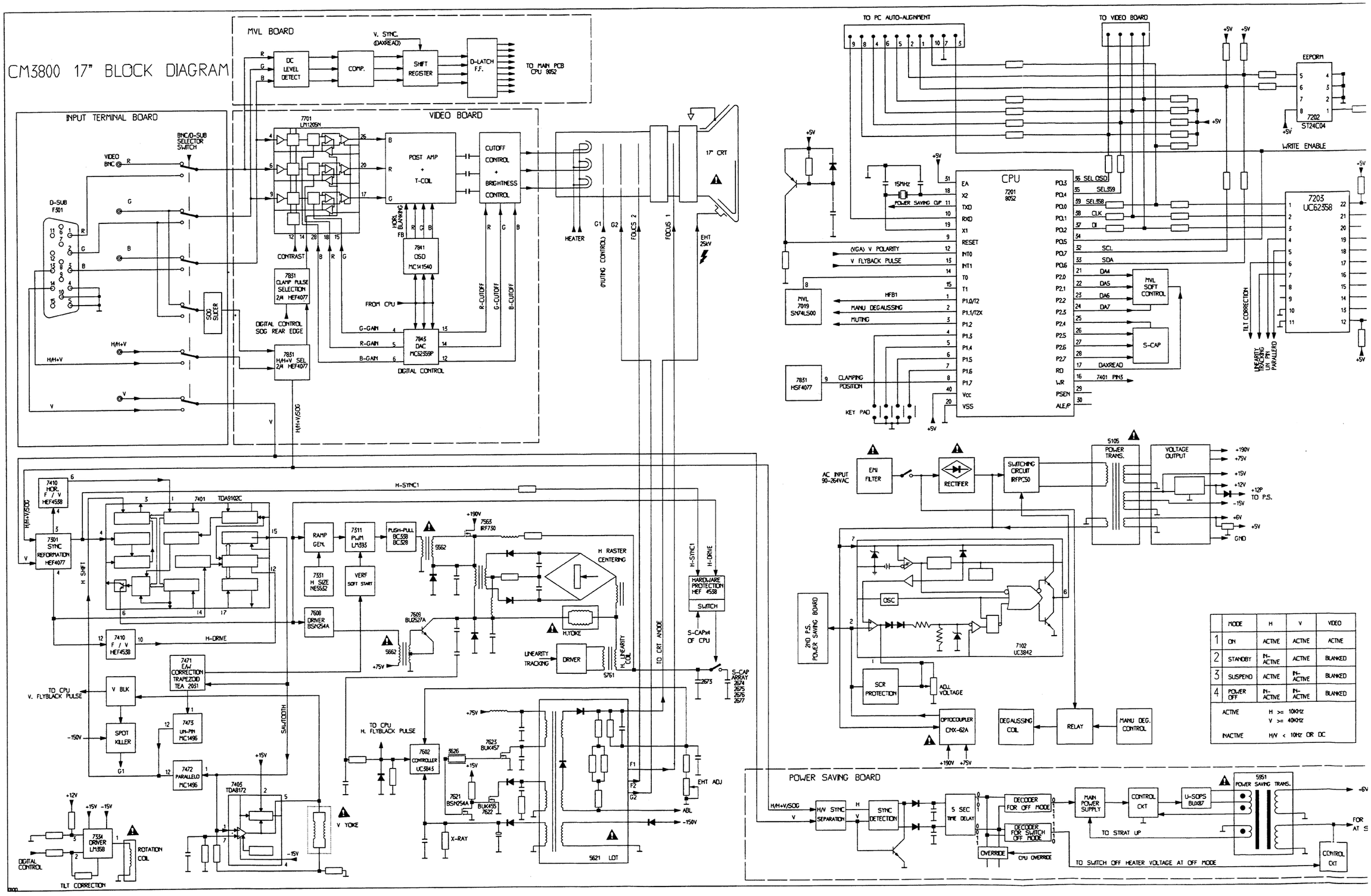
Video panel



PCS 80 222


TO MULTI PCB PANEL F011
TO MAIN PCB PANEL F405
TO LOT ON MAIN PCB PANEL
B-OUT
R-OUT
G-OUT
CONTRAST
BRIGHTNESS
H/H+V/SOC
CLAMP POS.
V SYNC
FBH1
14-bit shift register
DAC 8239BP
MEMORY & DATA MANAGEMENT
DATA RECEIVER
BUS ARBITRATION LOGIC
VERTICAL CONTROL CIRCUIT
HORIZONTAL CONTROL & PLL
ROW BUFFER
CHARACTER ROMS
10 BITS SHIFT REGISTERS
COLOUR ENCODER
BACKGROUND GENERATOR
B-GAIN
R-GAIN
G-GAIN
B-CUTOFF
R-CUTOFF
G-CUTOFF

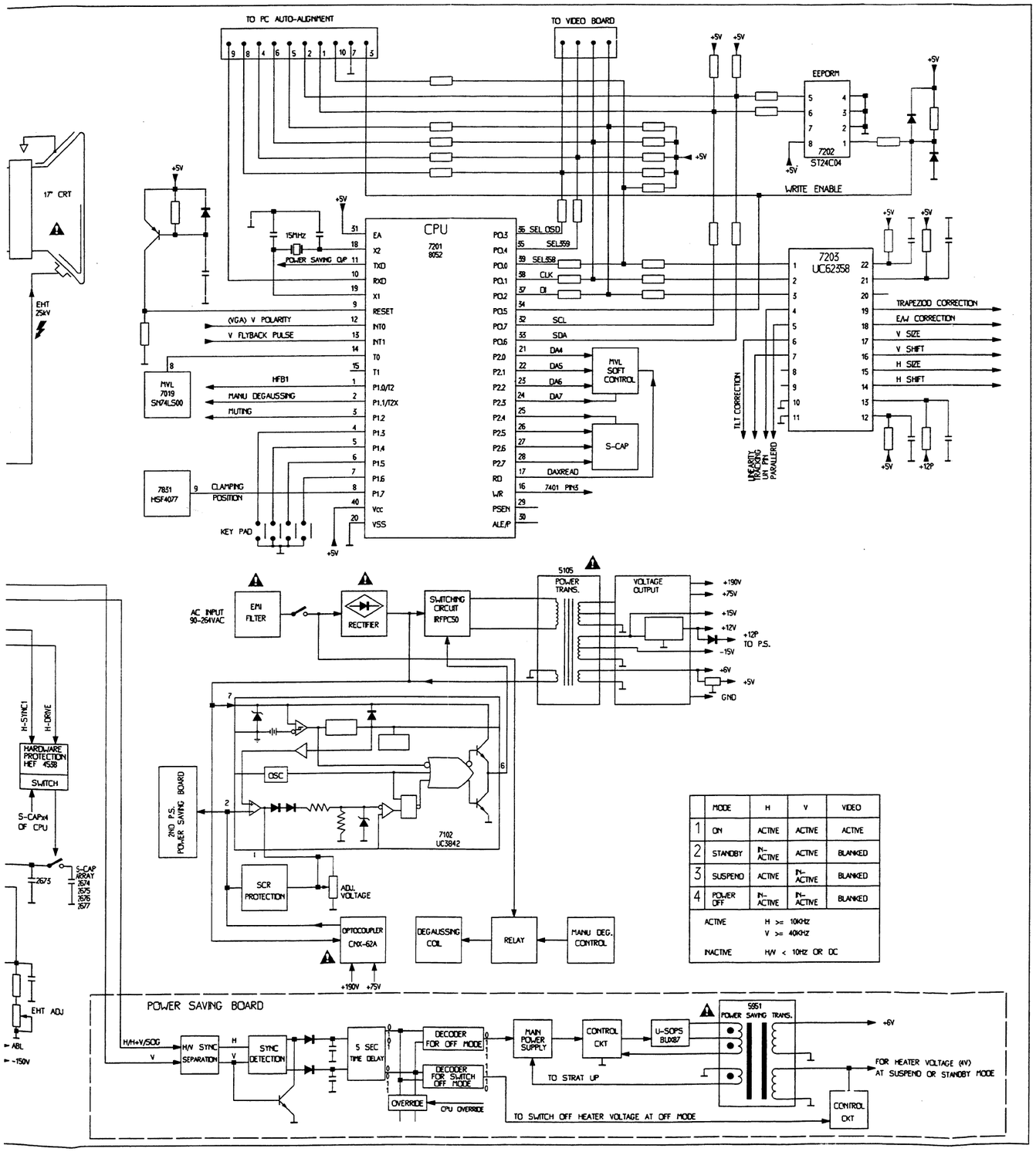
CM3800 17" BLOCK DIAGRAM



	MODE	H	V	VIDEO
1	ON	ACTIVE	ACTIVE	ACTIVE
2	STANDBY	IN-ACTIVE	ACTIVE	BLANKED
3	SUSPEND	ACTIVE	IN-ACTIVE	BLANKED
4	POWER OFF	IN-ACTIVE	IN-ACTIVE	BLANKED

ACTIVE: H >= 10KHz, V >= 40KHz

INACTIVE: H/V < 10Hz OR DC



	MODE	H	V	VIDEO
1	ON	ACTIVE	ACTIVE	ACTIVE
2	STANDBY	IN-ACTIVE	ACTIVE	BLANKED
3	SUSPEND	ACTIVE	IN-ACTIVE	BLANKED
4	POWER OFF	IN-ACTIVE	IN-ACTIVE	BLANKED

ACTIVE: H >= 10KHz, V >= 40KHz

INACTIVE: H/V < 10Hz OR DC

Video and Terminal PCB

F301 D 4 2710 C 5 2732 B 2 2772 B 4 2821 B 5 2853 D 5 3720 C 4 3742 D 5 3764 A 2 3786 A 5 3809 D 3 3841 C 2 5712 A 1 6884 C 3 7726 C 5
F302 D 5 2711 C 4 2733 D 4 2773 A 5 2822 C 5 2854 D 5 3721 B 5 3743 D 4 3765 B 5 3787 A 5 3810 D 2 3842 C 2 5721 A 4 6885 B 1 7727 D 4
F303 D 5 2712 C 4 2734 D 4 2801 D 1 2823 C 1 2855 D 5 3722 B 6 3744 B 5 3766 A 4 3788 B 5 3811 A 6 3843 D 3 5722 A 2 6821 C 2 7728 B 5
F305 B 3 2713 C 5 2741 D 5 2802 D 6 2824 C 2 3701 C 5 3723 B 6 3745 A 4 3767 A 3 3789 C 5 3812 C 2 3844 C 2 5731 B 5 6822 C 2 7731 B 5
N304 D 6 2714 C 5 2742 A 4 2803 D 2 2825 C 1 3702 C 5 3724 B 1 3746 A 5 3768 A 3 3790 B 4 3813 C 4 3845 C 1 5732 A 6 6823 D 1 7732 B 6
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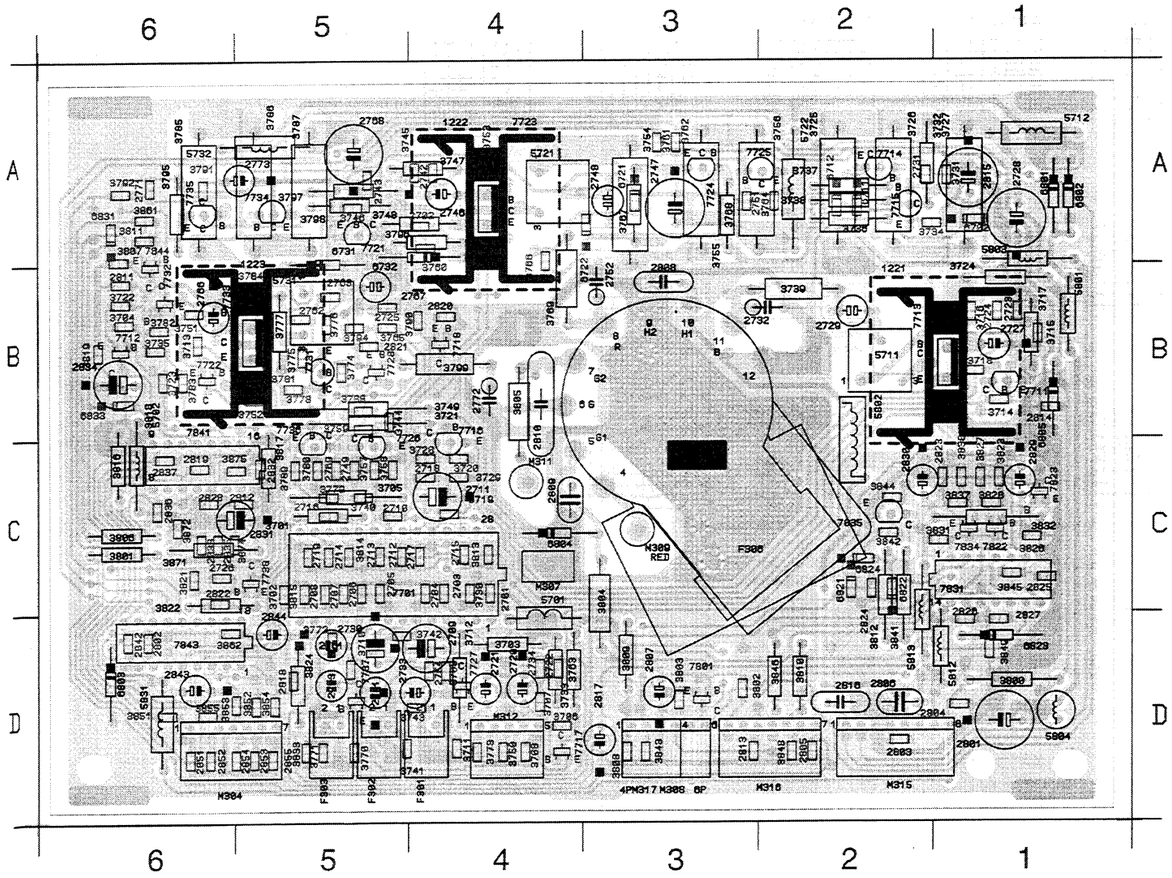

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F272 A 3 2252 A 1 2273 B 3 3842 B 1 3251 B 5 3260 B 2 3289 A 2 3278 B 4 3287 B 4 3297 A 2 7252 B 2 9253 A 4 9263 B 5
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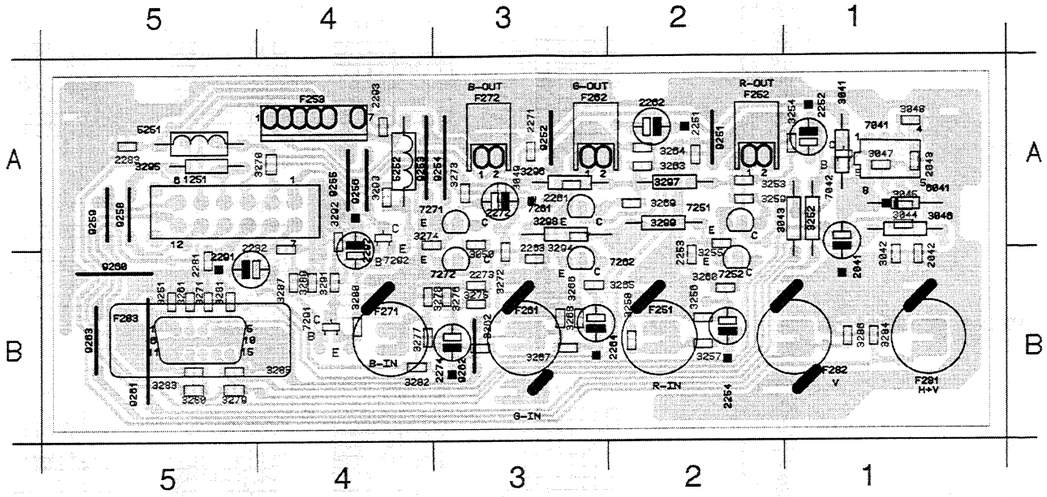
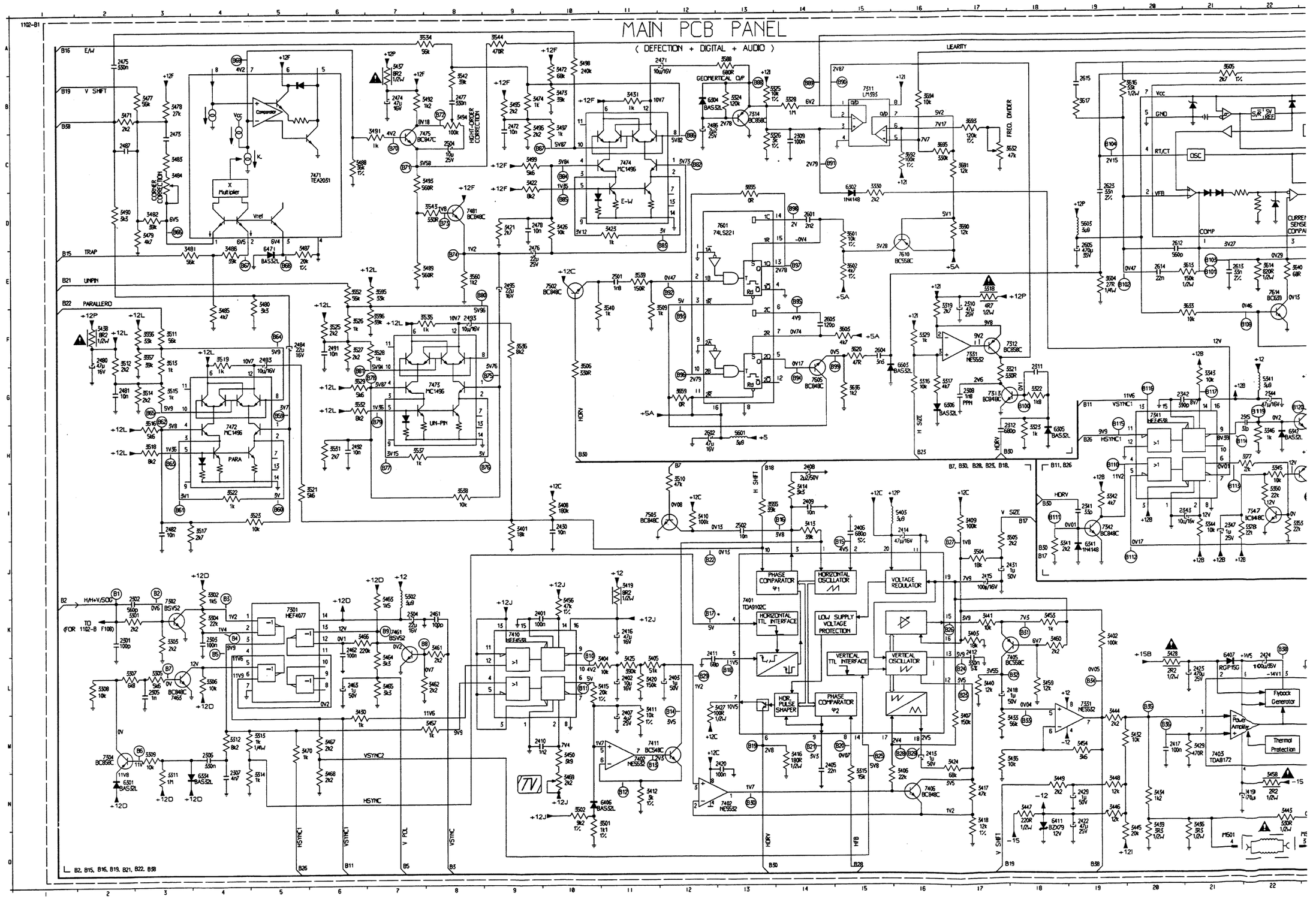
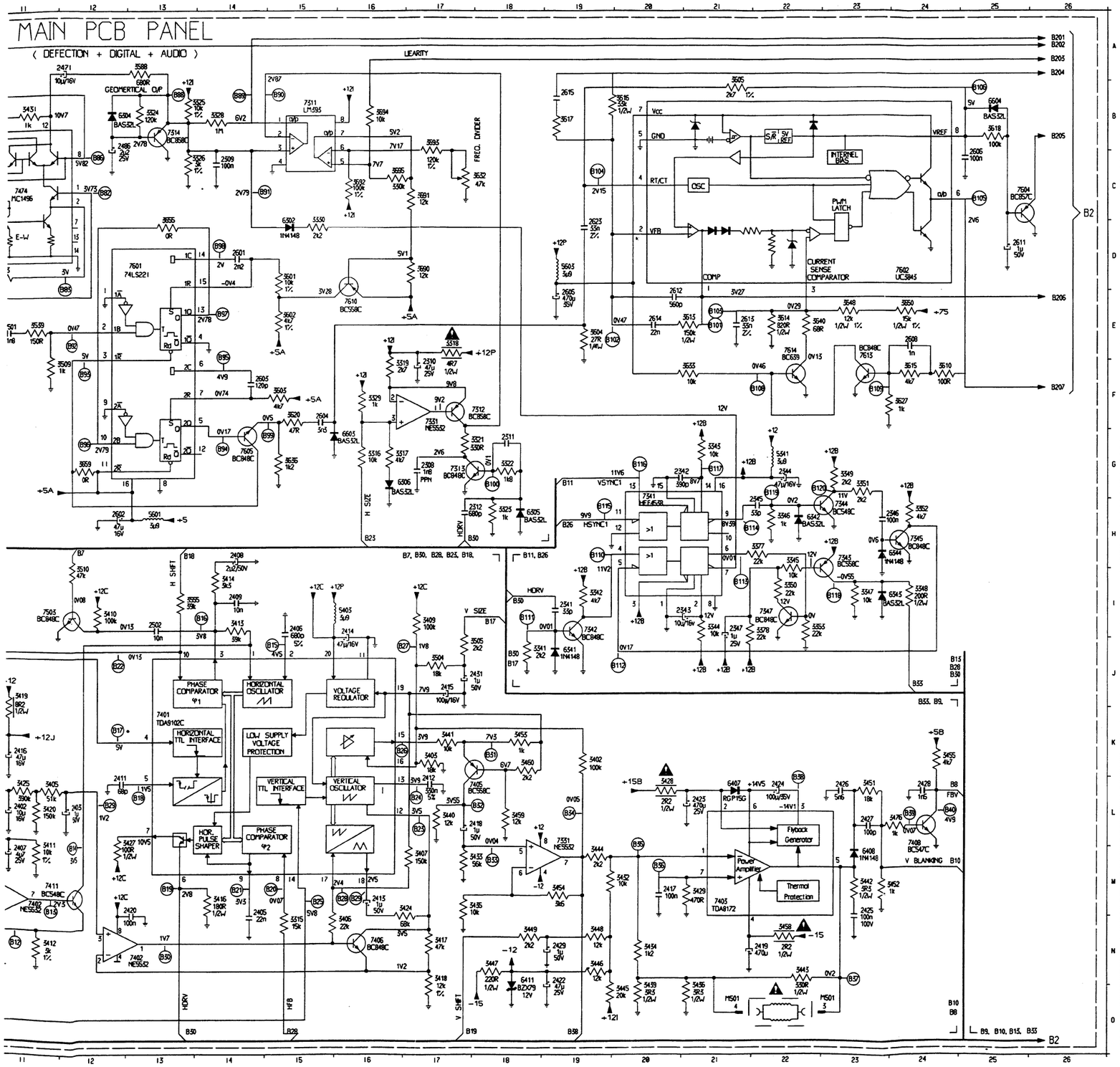


B1

MAIN PCB PANEL

(DEFECTION + DIGITAL + AUDIO)





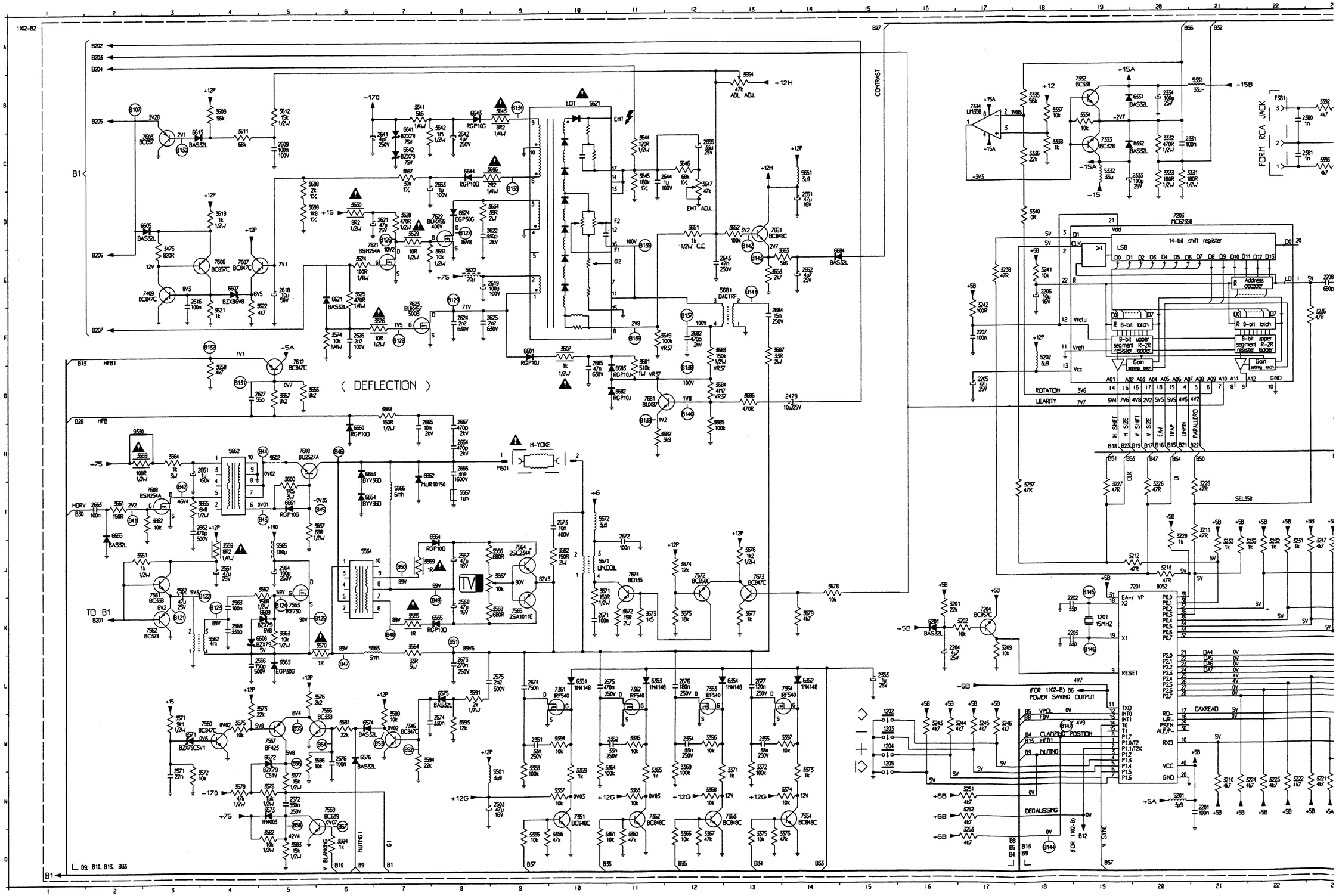
* : DEPENDS ON DEFFERENT MODE

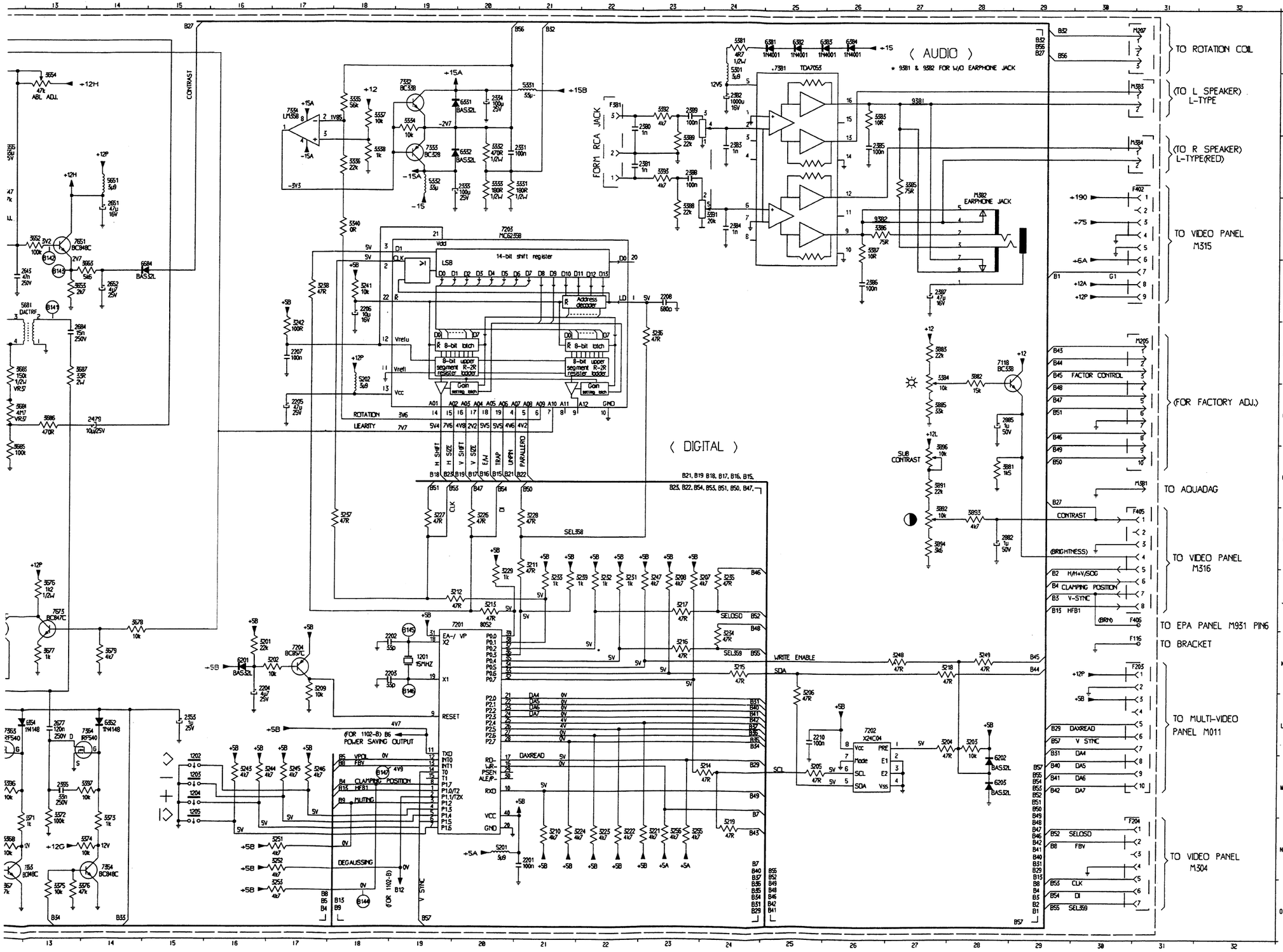
ITEM \ MODEL	WITH DPMS	WITHOUT DPMS	EPA
5106	——	33k 3W	33k 3W
5107	——	27k 3W	27k 3W
5121	——	1k 1/2W	1k 1/2W
6117	——	BZX79F15V	BZX79F15V
5125	100R 2W	330R 1/2W	330R 1/2W
5129	68R 1/4W	470R 1/4W	470R 1/4W
5155	47k	——	——
5152	47k	——	——
5178	100k	——	——
2118	100n	——	——
5146	2k7 1/2W	2k7 1/2W	——
5187	68k	——	——
5188	180R	——	——
2145	1µ 50V	——	——
7104	BC557	——	——
7105	BC848C	——	——
7141	BC548C	——	——
5157	——	——	5k6
5138	——	——	560R 1/2W
5140	——	——	470R
7121	——	——	BD454
7122	——	——	BC548C
2155	——	——	100µ 16V
5139	——	——	——
9124	9124	9124	——
9125	9125	——	——
9128	9128	9128	——
F108	F108	——	——
F110	F110	——	F110
F112	F112	——	——
F115	——	——	F115
M105	M105	——	——

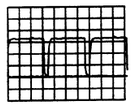
DPMS : DISPLAY POWER MANAGEMENT SIGNALING
EPA : ENVIRONMENT PROTECTION ASSOCIATION

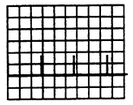
Main panel

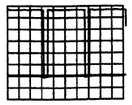
B2

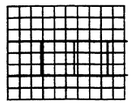


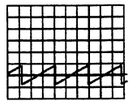

(AUDIO)
* 9381 & 9382 FOR W/O EARPHONE JACK
TDA7055
FORM RCA JACK
EARPHONE JACK
TO ROTATION COIL
(TO L SPEAKER) L-TYPE
(TO R SPEAKER) L-TYPE(RED)
TO VIDEO PANEL M315
(FOR FACTORY ADJ.)
TO AQUADAG
TO VIDEO PANEL M316
TO EPA PANEL M931 PIN6
TO BRACKET
TO MULTI-VIDEO PANEL M011
TO VIDEO PANEL M304
FACTOR CONTROL
CONTRAST
(BRIGHTNESS)
H/H+V/SOG
CLAMPING POSITION
V-SYNC
HFB1
DAXREAD
V SYNC
DA4
DA5
DA6
DA7
SELOSD
FBV
CLK
DI
SEL359
(DIGITAL)
14-bit shift register
8-bit upper segment R-2R resistor ladder
8-bit latch
Gain setting latch
ROTATION LEARITY
H SHIFT
H SIZE
V SHIFT
V SIZE
EW
TRAP
UNPH
PARALLERO
WRITE ENABLE
SDA
SCL
RESET
DEGAUSSING
(FOR 1102-B) B6 POWER SAVING OUTPUT
ABL ADJ.
CONTRAST
SUB CONTRAST
DACTRF

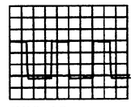
B1 2302

1V/div AC
5us/div

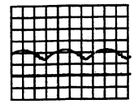
B9 7461-C

5V/div AC
5us/div

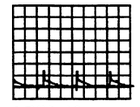
B17 7401-4

1V/div AC
5us/div

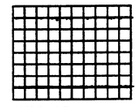
B25 7401-14

2V/div AC
5ms/div

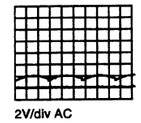
B33 7331-5

2V/div AC
5ms/div

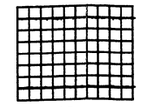
B41 7608-G

2V/div AC
5us/div

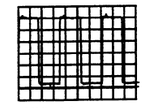
B49 5564-8

50V/div AC
5us/div

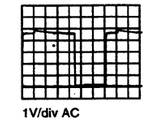
B57 7569-B

0.5V/div AC
5ms/div

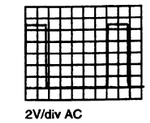
B65 7472-10

1V/div AC
5ms/div

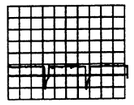
B73 7481-B

2V/div AC
5ms/div

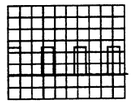
B81 7473-10

1V/div AC
5ms/div

B89 7311-1

2V/div AC
5us/div

B97 7601-13

1V/div AC
5us/div

B105 7602-6

2V/div AC
5us/div

B2 7302-B

1V/div AC
5us/div

B10 7410-10

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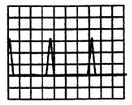
B18 7401-5

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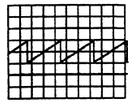
5us/div

B26 7401-15

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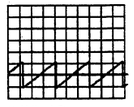
5ms/div

B34 7331-7

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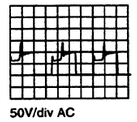
5ms/div

B42 7608-D

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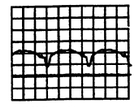
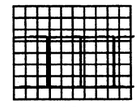
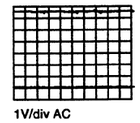
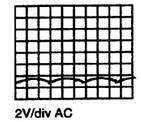
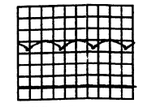
5us/div

B50 5564-9

50V/div AC
5us/div

B58 7569-C

10V/div AC
5ms/div

B66 7471-1

1V/div AC
5ms/div

B74 7481-E

2V/div AC
5ms/div

B82 7474-1

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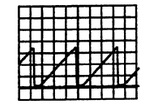
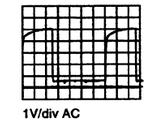
5ms/div

B90 7311-2

2V/div AC
5us/div

B98 7601-14

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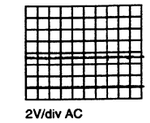
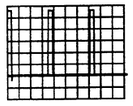
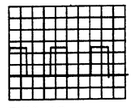
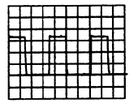
5us/div

B106 7602-8

2V/div AC
5us/div

B3 7301-1

2V/div AC
5us/div

B11 7410-6

5V/div AC
5us/div

B19 7401-6

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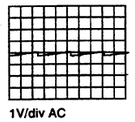
5us/div

B27 7401-16

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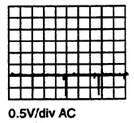
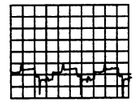
5ms/div

B35 7403-1

0.5V/div AC
5ms/div

B43 5662-6

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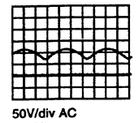
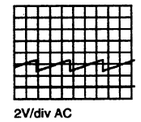
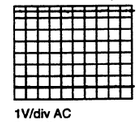
5us/div

B51 5671-1

50V/div AC
5us/div

B59 7472-1

2V/div AC
5ms/div

B67 7471-2

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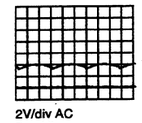
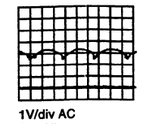
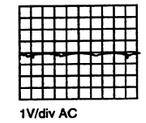
5ms/div

B75 7473-1

2V/div AC
5ms/div

B83 7474-2

1V/div AC
5ms/div

B91 7311-3

1V/div AC
5ms/div

B99 7605-E

1V/div AC
5us/div

B107 7604-E

1V/div AC
5ms/div

B4 7301-2

1V/div AC
5us/div

B12 7402-6

0.5V/div AC
5us/div

B20 7401-8

0.5V/div AC
5us/div

B28 7401-17

1V/div AC
5ms/div

B36 7403-7

0.5V/div AC
5ms/div

B44 5662-7

1V/div AC
5us/div

B52 7346-B

0.5V/div AC
5us/div

B60 7472-2

2V/div AC
5ms/div

B68 7471-3

1V/div AC
5ms/div

B76 7473-2

2V/div AC
5ms/div

B84 7474-3

0.5V/div AC
5ms/div

B92 7601-2

1V/div AC
5us/div

B100 7373-B

0.5V/div AC
5us/div

B108 7614-B

1V/div AC
10us/div

B5 7301-3

2V/div AC
5us/div

B13 7402-7

0.5V/div AC
5us/div

B21 7401-9

1V/div AC
5us/div

B29 7401-18

1V/div AC
5ms/div

B37 7403-5

10V/div AC
5ms/div

B45 7609-B

5V/div AC
5us/div

B53 7346-C

0.2V/div AC
5us/div

B61 7472-3

1V/div AC
5ms/div

B69 7471-7

1V/div AC
5ms/div

B77 7473-3

0.5V/div AC
5ms/div

B85 7474-4

1V/div AC
5ms/div

B93 7601-3

1V/div AC
5ms/div

B101 7602-1

1V/div AC
5ms/div

B109 7613-B

2V/div AC
5us/div

B6 7304-B

2V/div AC
5us/div

B14 7411-C

1V/div AC
5us/div

B22 7401-10

1V/div AC
5us/div

B30 7402-1

1V/div AC
5ms/div

B38 7403-3

10V/div AC
5ms/div

B46 7609-C

100V/div AC
5us/div

B54 7566-B

0.2V/div AC
5us/div

B62 7472-4

1V/div AC
5ms/div

B70 7475-B

1V/div AC
5ms/div

B78 7473-4

1V/div AC
5ms/div

B86 7474-5

1V/div AC
5ms/div

B94 7601-5

1V/div AC
5us/div

B102 7602-2

1V/div AC
5ms/div

B110 7341-4

2V/div AC
5us/div

B7 7463-B

0.1V/div AC
5us/div

B15 7401-2

2V/div AC
5us/div

B23 7401-12

1V/div AC
5us/div

B31 7405-E

2V/div AC
5ms/div

B39 7408-B

0.5V/div AC
5ms/div

B47 5564-1

100V/div AC
5us/div

B55 7566-C

2V/div AC
5ms/div

B63 7472-5

1V/div AC
5ms/div

B71 7475-E

1V/div AC
5ms/div

B79 7473-5

1V/div AC
5ms/div

B87 7474-10

1V/div AC
5ms/div

B95 7601-6

1V/div AC
5us/div

B103 7602-3

0.5V/div AC
5us/div

B111 7342-B

0.5V/div AC
5us/div

B8 7461-B

20mV/div AC
5us/div

B16 7401-3

1V/div AC
5us/div

B24 7401-13

2V/div AC
5ms/div

B32 7405-C

2V/div AC
5ms/div

B40 7408-C

1V/div AC
5ms/div

B48 5564-7

50V/div AC
5us/div

B56 7567-C

10mV/div AC
5ms/div

B64 7472-8

1V/div AC
5ms/div

B72 7475-C

2V/div AC
5ms/div

B80 7473-8

1V/div AC
5ms/div

B88 7314-E

1V/div AC
5ms/div

B96 7601-10

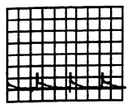
1V/div AC
5us/div

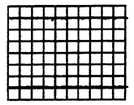
B104 7602-4

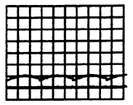
0.5V/div AC
5us/div

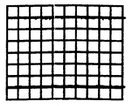
B112 7341-5

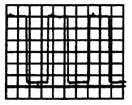
2V/div AC
5us/div

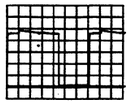
B57 7569-B

0.5V/div AC
5ms/div

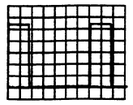
B65 7472-10

1V/div AC
5ms/div

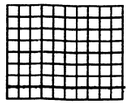
B73 7481-B

2V/div AC
5ms/div

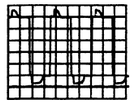
B81 7473-10

1V/div AC
5ms/div

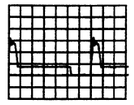
B89 7311-1

2V/div AC
5us/div

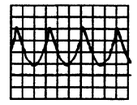
B97 7601-13

1V/div AC
5us/div

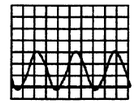
B105 7602-6

2V/div AC
5us/div

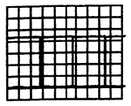
B113 7341-6

2V/div AC
5us/div

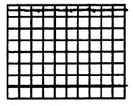
B121 7561-E

2V/div AC
5us/div

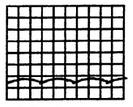
B129 7623-D

100V/div AC
5us/div

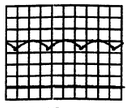
B137 5681-4

50V/div AC
5ms/div

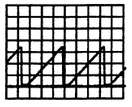
B145 7201-18

2V/div AC
20ns/div

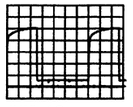
B58 7569-C

10V/div AC
5ms/div

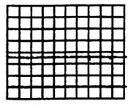
B66 7471-1

1V/div AC
5ms/div

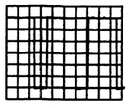
B74 7481-E

2V/div AC
5ms/div

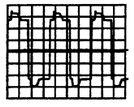
B82 7474-1

1V/div AC
5ms/div

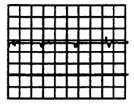
B90 7311-2

2V/div AC
5us/div

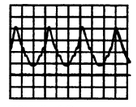
B98 7601-14

1V/div AC
5us/div

B106 7602-8

2V/div AC
5us/div

B114 7341-9

2V/div AC
5us/div

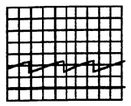
B122 5562-2

2V/div AC
5us/div

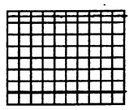
B130 7603-B

1V/div AC
5ms/div

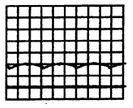
B138 7681-C

50V/div AC
5ms/div

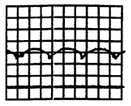
B146 7201-19

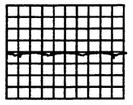
2V/div AC
20ns/div

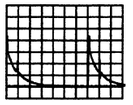
B59 7472-1

2V/div AC
5ms/div

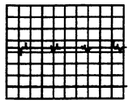
B67 7471-2

1V/div AC
5ms/div

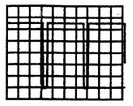
B75 7473-1

2V/div AC
5ms/div

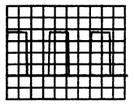
B83 7474-2

1V/div AC
5ms/div

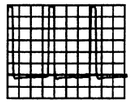
B91 7311-3

1V/div AC
5ms/div

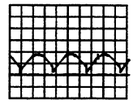
B99 7605-E

1V/div AC
5us/div

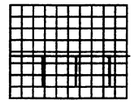
B107 7604-E

1V/div AC
5ms/div

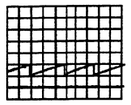
B115 7341-11

2V/div AC
5us/div

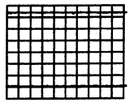
B123 5562-3

50V/div AC
5us/div

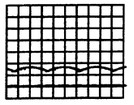
B131 7612-B

1V/div AC
5us/div

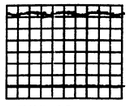
B139 7681-E

1V/div AC
5ms/div

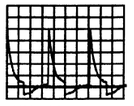
B147 7201-13

2V/div AC
5ms/div

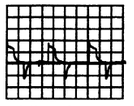
B60 7472-2

2V/div AC
5ms/div

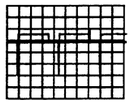
B68 7471-3

1V/div AC
5ms/div

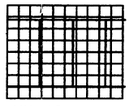
B76 7473-2

2V/div AC
5ms/div

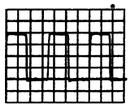
B84 7474-3

0.5V/div AC
5ms/div

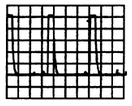
B92 7601-2

1V/div AC
5us/div

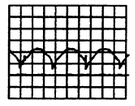
B100 7373-B

0.5V/div AC
5us/div

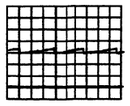
B108 7614-B

1V/div AC
10us/div

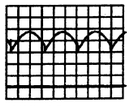
B116 7341-13

2V/div AC
5ms/div

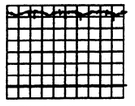
B124 7563-G

50V/div AC
5us/div

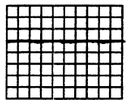
B132 7612-E

1V/div AC
5us/div

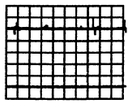
B140 7681-B

1V/div AC
5ms/div

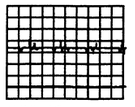
B61 7472-3

1V/div AC
5ms/div

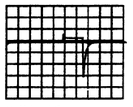
B69 7471-7

1V/div AC
5ms/div

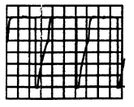
B77 7473-3

0.5V/div AC
5ms/div

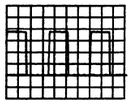
B85 7474-4

1V/div AC
5ms/div

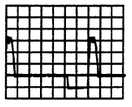
B93 7601-3

1V/div AC
5ms/div

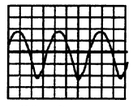
B101 7602-1

1V/div AC
5ms/div

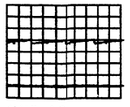
B109 7613-B

2V/div AC
5us/div

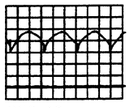
B117 7341-14

2V/div AC
5us/div

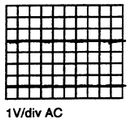
B125 7563-S

50V/div AC
5us/div

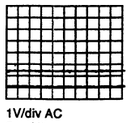
B133 5621-6

20V/div AC
5us/div

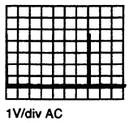
B141 5681-2

5V/div AC
5us/div

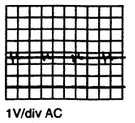
B62 7472-4

1V/div AC
5ms/div

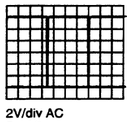
B70 7475-B

1V/div AC
5ms/div

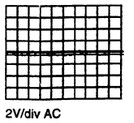
B78 7473-4

1V/div AC
5ms/div

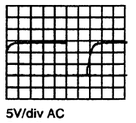
B86 7474-5

1V/div AC
5ms/div

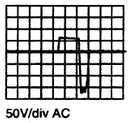
B94 7601-5

1V/div AC
5us/div

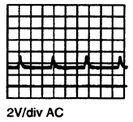
B102 7602-2

1V/div AC
5ms/div

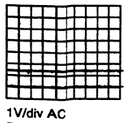
B110 7341-4

2V/div AC
5us/div

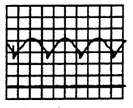
B118 7343-C

2V/div AC
5us/div

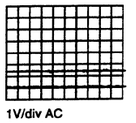
B126 7621-D

5V/div AC
5us/div

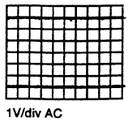
B134 5621-9

50V/div AC
5us/div

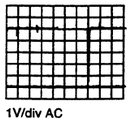
B142 7651-B

2V/div AC
5ms/div

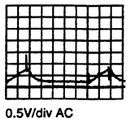
B63 7472-5

1V/div AC
5ms/div

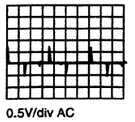
B71 7475-E

1V/div AC
5ms/div

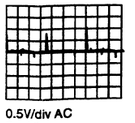
B79 7473-5

1V/div AC
5ms/div

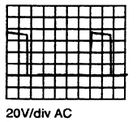
B87 7474-10

1V/div AC
5ms/div

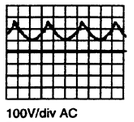
B95 7601-6

1V/div AC
5us/div

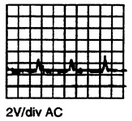
B103 7602-3

0.5V/div AC
5us/div

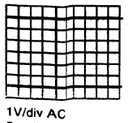
B111 7342-B

0.5V/div AC
5us/div

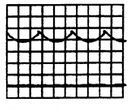
B119 7344-B

0.5V/div AC
5us/div

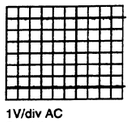
B127 7622-D

20V/div AC
5us/div

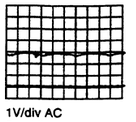
B135 5621-11

100V/div AC
5ms/div

B143 7651-E

2V/div AC
5ms/div

B64 7472-8

1V/div AC
5ms/div

B72 7475-C

2V/div AC
5ms/div

B80 7473-8

1V/div AC
5ms/div

B88 7314-E

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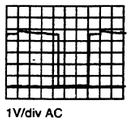
5ms/div

B96 7601-10

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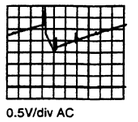
5us/div

B104 7602-4

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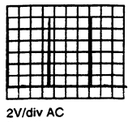
5us/div

B112 7341-5

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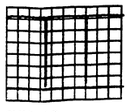
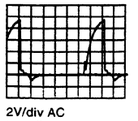
5us/div

B120 7344-C

2V/div AC
5us/div

B128 7623-G

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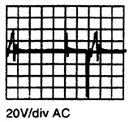
5us/div

B136 5621-8

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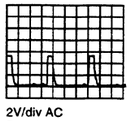
B144 7201-1

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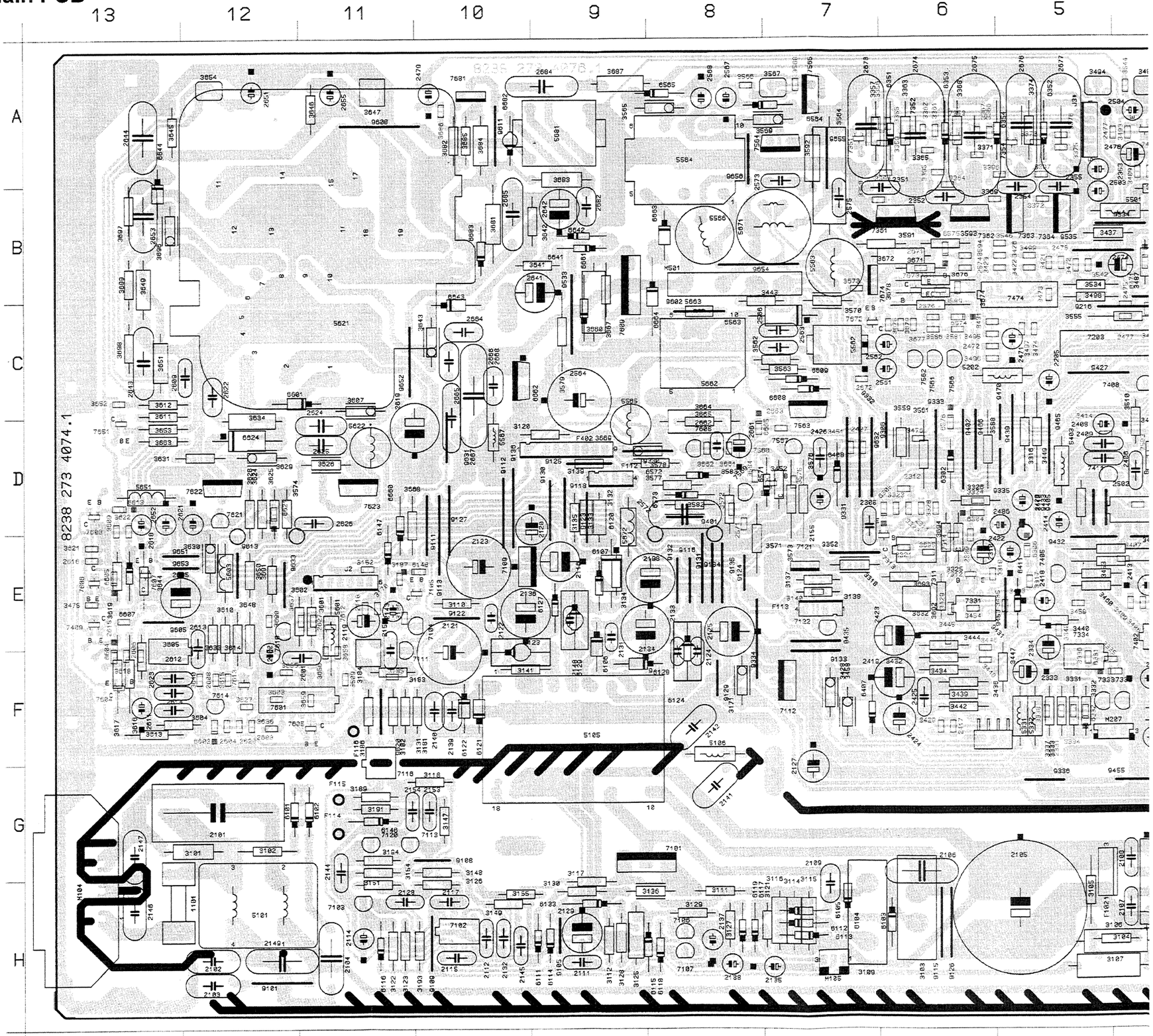
5us/div

Main PCB



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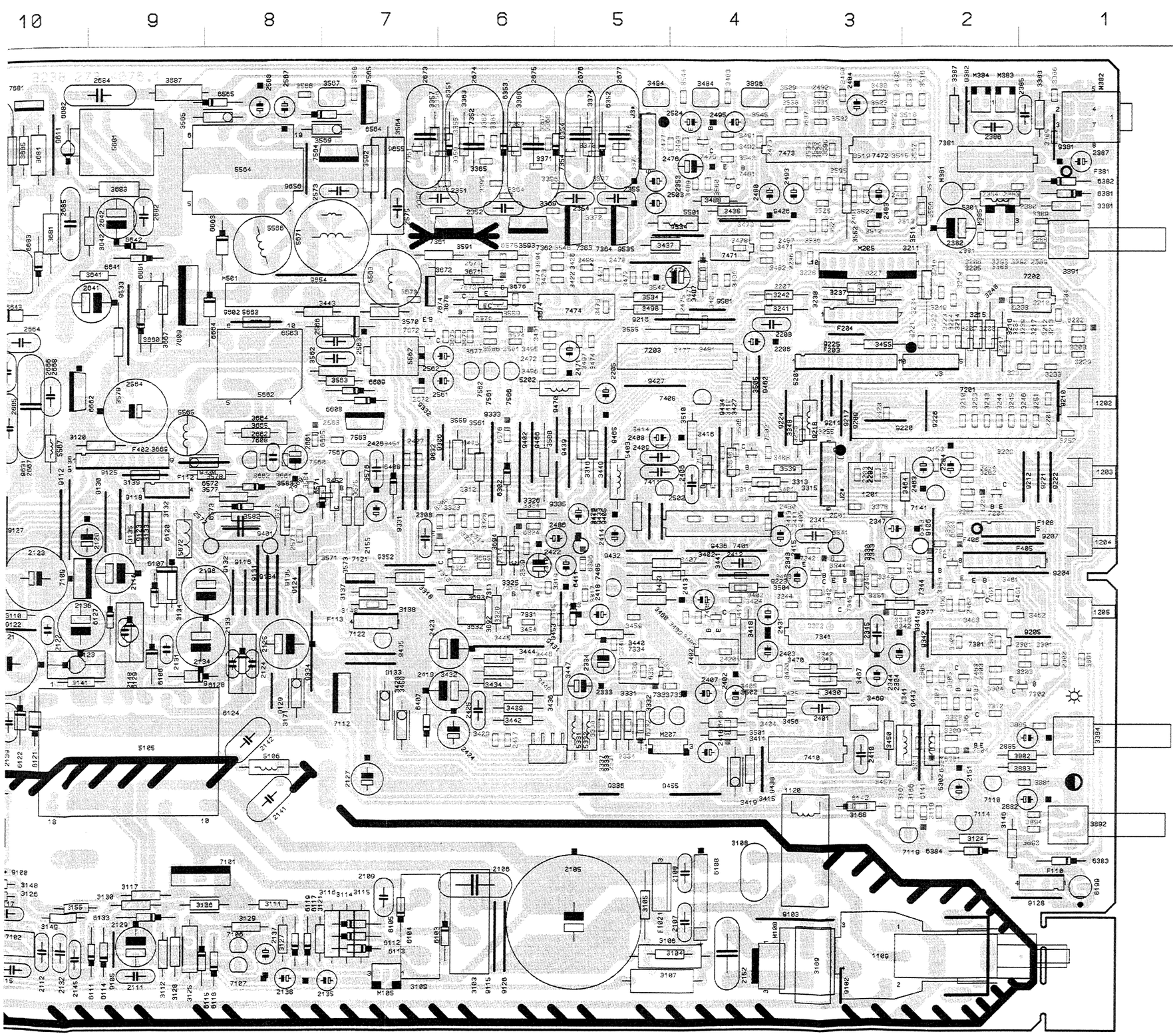
PCS 80 228


10
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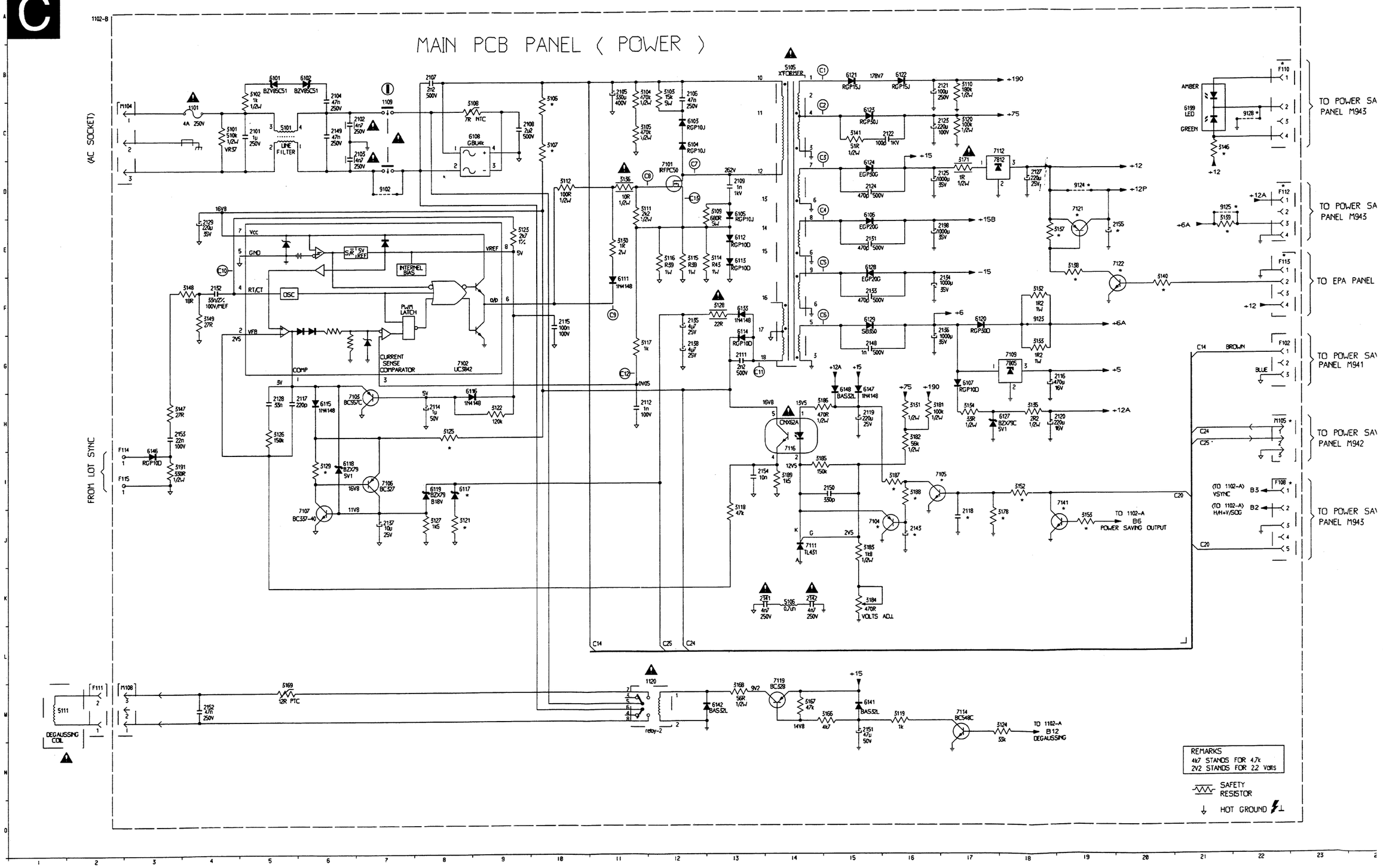
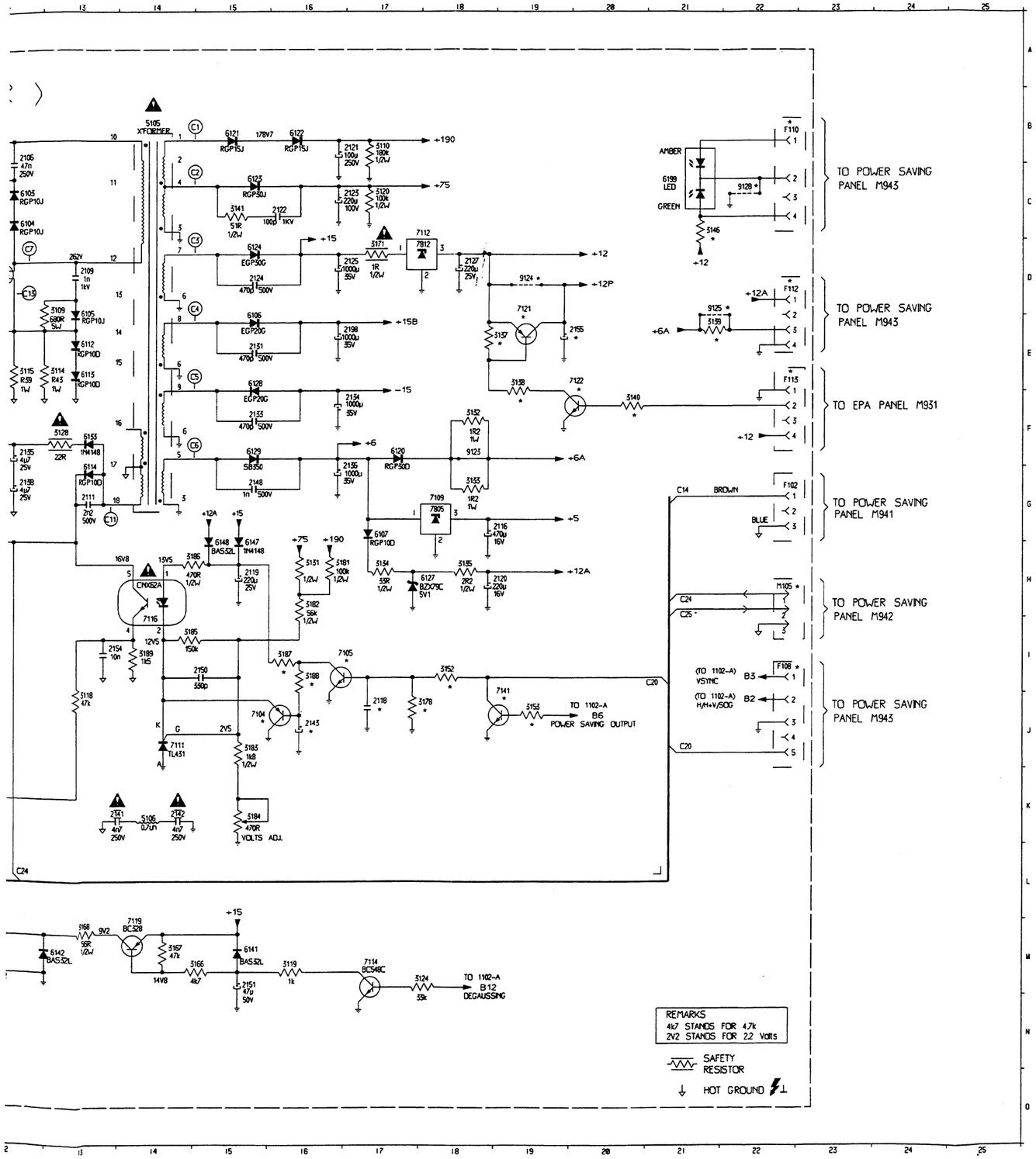
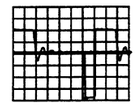
MAIN PCB PANEL (POWER)



Main power panel

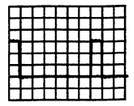


C1 5105-1



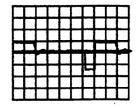
100V/div AC
5us/div

C9 7102-6



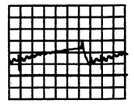
5V/div AC
5us/div

C2 5105-4



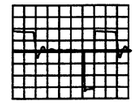
100V/div AC
5us/div

C10 7102-4



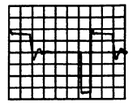
1V/div AC
5us/div

C3 5105-7



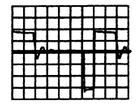
10V/div AC
5us/div

C11 5105-18



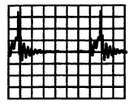
10V/div AC
5us/div

C4 5105-8



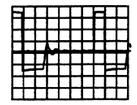
10V/div AC
5us/div

C12 7102-3



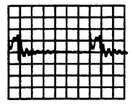
0V5/div AC
5us/div

C5 5105-9



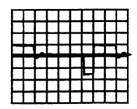
10V/div AC
5us/div

C13 7101-S



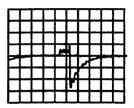
0V5/div AC
5us/div

C6 5105-5



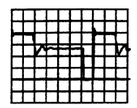
10V/div AC
5us/div

C14 7120-B



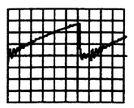
2V/div AC
5us/div

C7 7101-D



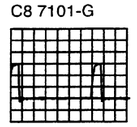
100V/div AC
5us/div

C15 7120-C



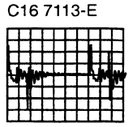
1V/div AC
5us/div

C8 7101-G



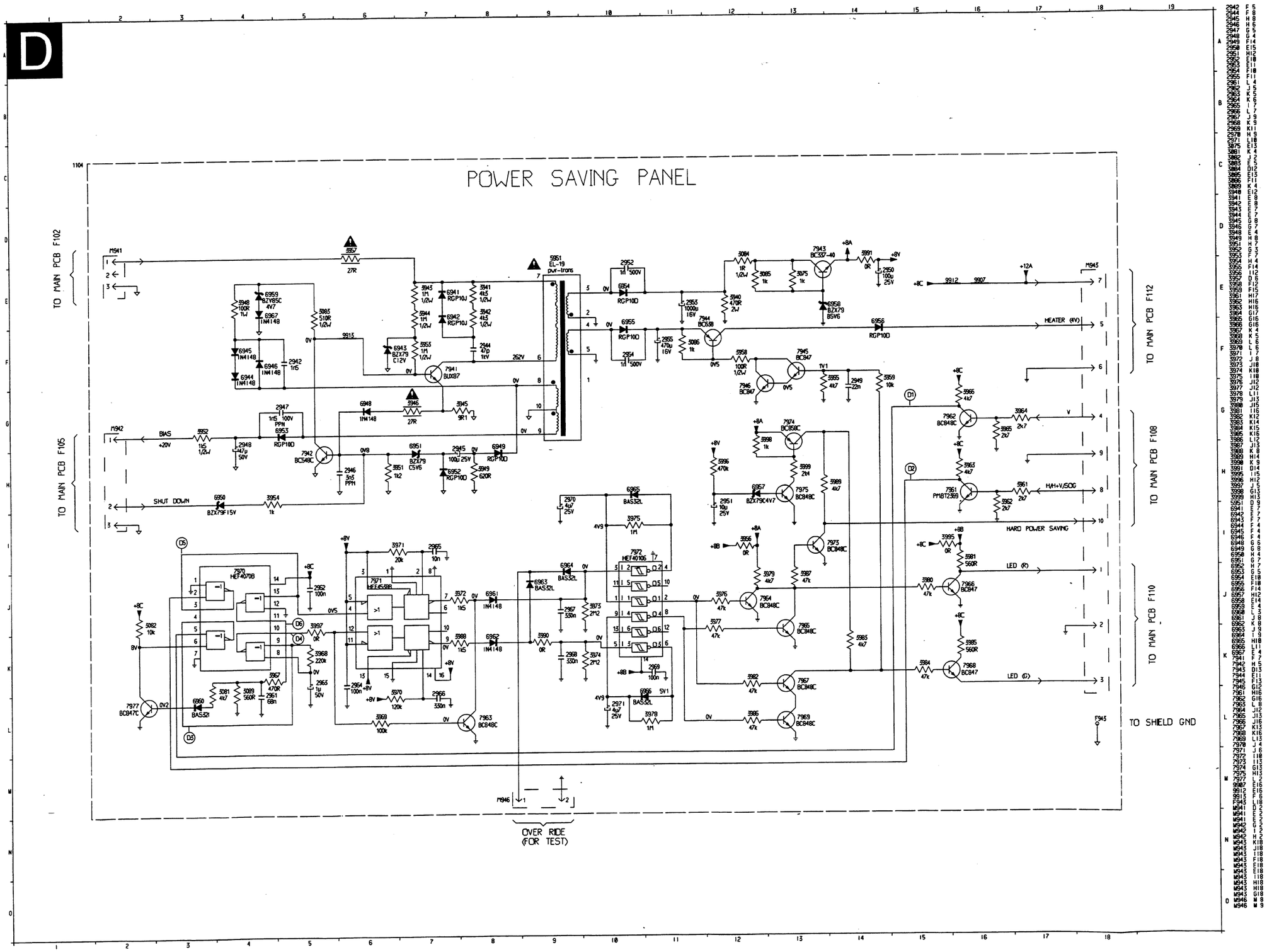
5V/div AC
5us/div

C16 7113-E

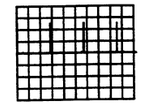


0V5/div AC
5us/div

Power saving panel

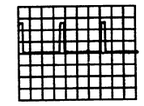


D1 7962-C



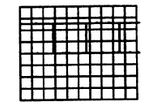
2V/div AC
5ms/div

D2 7961-C



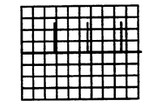
2V/div AC
5us/div

D3 7970-4



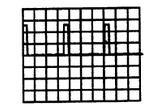
2V/div AC
5ms/div

D4 7970-10



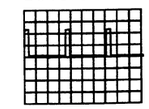
2V/div AC
5ms/div

D5 7970-3



2V/div AC
5us/div

D6 7970-11



1V/div AC
5us/div

F943 C 2	2953 A 2	3883 A 4	3958 C 1	3987 C 1	3994 B 1	6941 C 4	6958 B 2	7946 C 2	9981 B 4		
F948 A 1	2954 C 2	3884 A 2	3961 A 4	3988 C 1	3995 B 1	6942 B 4	6959 A 4	7961 C 2	9982 A 2		
H941 C 3	2955 C 2	3885 A 2	3962 A 3	3989 A 1	3996 B 2	6943 C 4	6960 C 1	7962 C 1	9983 C 1		
H942 A 3	2961 C 1	3886 C 2	3963 B 4	3978 A 2	3997 B 2	6944 A 3	6961 A 1	7963 A 1	9984 C 2		
H943 B 1	2962 C 2	3887 B 2	3964 A 4	3971 A 2	3998 A 1	6945 B 4	6962 A 1	7964 A 2	9985 B 1		
2941 C 4	2963 C 1	3888 C 1	3965 C 2	3972 A 1	3999 B 2	6946 B 3	6963 A 1	7965 B 2	9987 C 1		
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2943 B 4	2965 A 2	3948 A 1	3967 C 3	3974 A 1	3991 A 2	6948 B 4	6965 A 2	7967 B 2	9911 A 2		
2944 B 3	2966 A 2	3941 B 3	3968 B 2	3975 A 2	3992 C 2	6949 A 3	6966 B 1	7968 B 1	9912 C 1		
2945 A 4	2967 A 2	3942 B 3	3969 B 2	3976 B 2	3993 B 2	6950 A 3	6967 A 4	7969 B 1	9913 A 4		
2946 A 4	2968 A 1	3943 C 4	3968 C 1	3977 B 2	3984 B 1	6951 A 4	6968 C 1	7976 C 2	9914 A 2		
2947 A 3	2969 B 1	3944 B 4	3961 C 2	3978 B 1	3985 B 1	6952 A 3	6969 C 1	7971 A 2	9915 C 2		
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2949 C 2	2971 B 1	3946 C 4	3963 C 2	3980 B 2	3987 A 1	6954 A 2	7942 A 4	7973 B 2			
2950 A 2	3875 A 2	3947 A 4	3964 C 1	3981 B 1	3988 B 3	6955 C 2	7943 A 2	7974 B 2			
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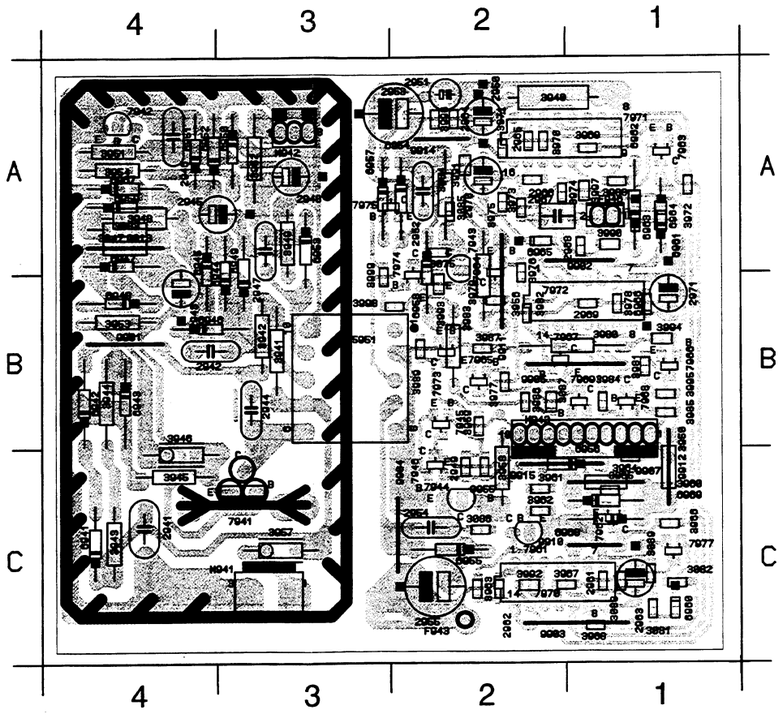
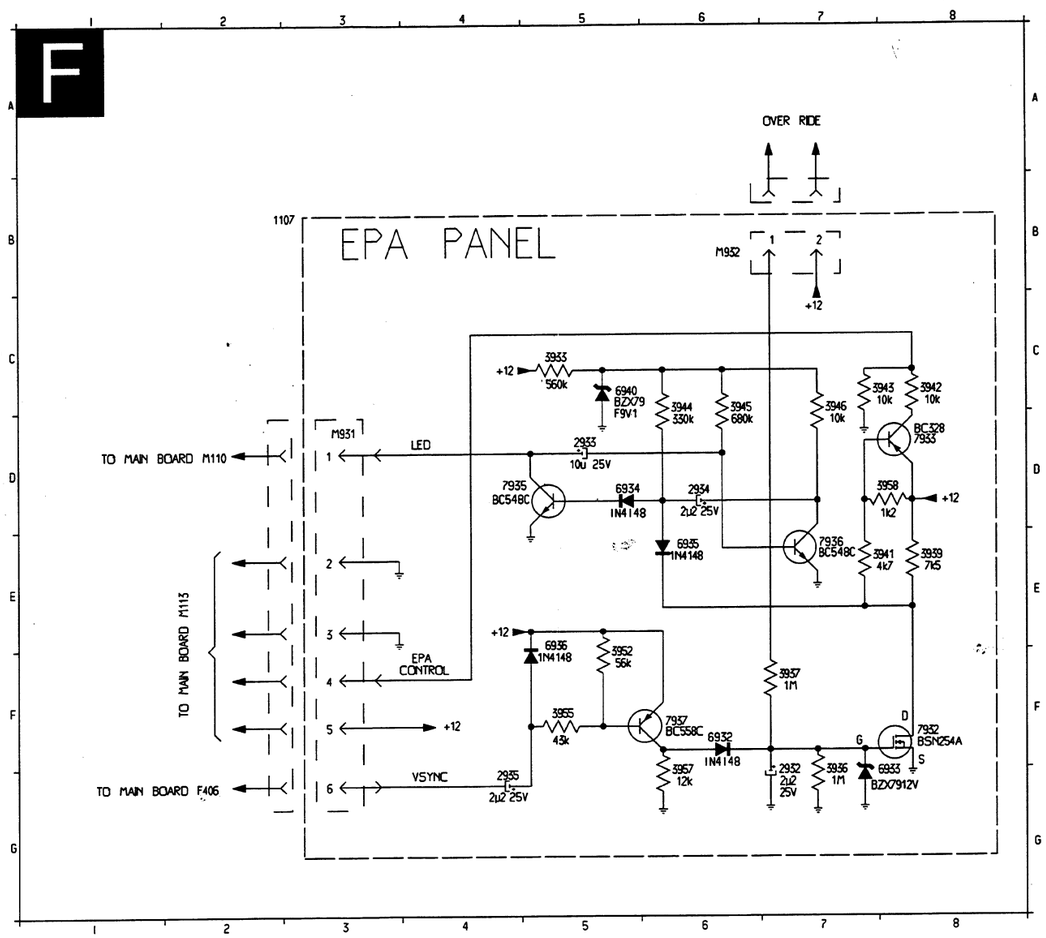
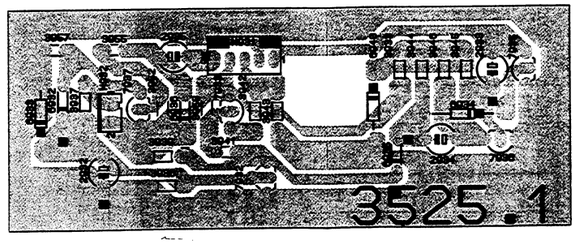


EPA panel



OPTION



MULTI VIDEO PANEL

1106

TO MAIN PCB PANEL F203

TO VIDEO PANEL M312

M011 +12P +5 VSYNC E5 E14 E6 E7 E8 E9

2011 10u 16V
2014 10u 16V
2025 10u 16V
2024 10u 16V
2026 10u 16V

F011 B R G

3021 100R
3022 470R
3023 200k
3014 4k7 1%
3013 470R 1%
3015 100R
3016 470R
3017 200k
3025 100R
3026 470R
3027 200k

6013 BAS32L
6012 BAS32L
6014 BAS32L
6011 BAS32L

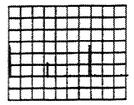
2023 100n
2012 100n
2013 100n
2027 100n
2022 100n
3012 200k
3011 470R
2018 100n
2019 100n
2021 100n
2016 100n
2017 100n
2020 100n
2015 100n
3028 2k2
3024 2k2
3018 2k2

7012 LM319
7011 LM319
7016 74HCT02
7017 74HCT02
7019 74HCT00
7013 74LS373
7014 74LS164
7015 74LS164
7018 74LS20

E1, E2, E3, E4,
E6, E7, E8, E9, E14.
E2, E3, E4, E10, E11, E12, E13.

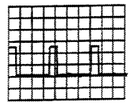
Multi video panel

E1 7013-2



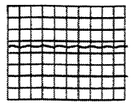
2V/div AC
5us/div

E9 7014-2



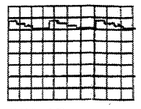
2V/div AC
5us/div

E17 7016-5



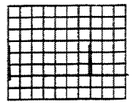
2V/div AC
0.2ms/div

E25 7012-4



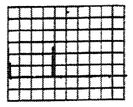
1V/div AC
5us/div

E2 7013-3



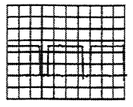
2V/div AC
5us/div

E10 7014-10



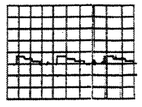
2V/div AC
5us/div

E18 7016-8



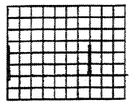
2V/div AC
5us/div

E26 2025(-)



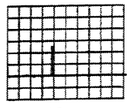
1V/div AC
5us/div

E3 7013-4



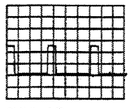
2V/div AC
5us/div

E11 7014-11



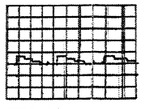
2V/div AC
5us/div

E19 7016-12



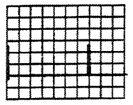
2V/div AC
5us/div

E27 2024(-)



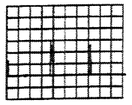
1V/div AC
5us/div

E4 7013-5



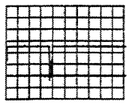
2V/div AC
5us/div

E12 7014-12



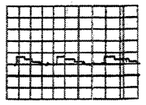
2V/div AC
5us/div

E20 7017-1



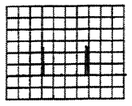
2V/div AC
5us/div

E28 2026(-)



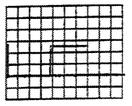
1V/div AC
5us/div

E5 7013-6



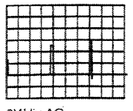
2V/div AC
5us/div

E13 7014-13



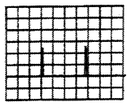
2V/div AC
5us/div

E21 7019-3



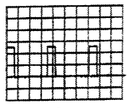
2V/div AC
5us/div

E6 7013-7



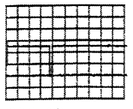
2V/div AC
5us/div

E14 7015-8



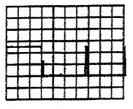
2V/div AC
5us/div

E22 7019-6



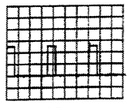
2V/div AC
5us/div

E7 7013-8



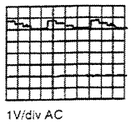
2V/div AC
5us/div

E15 7015-9



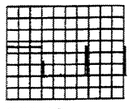
2V/div AC
5us/div

E23 7011-5



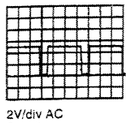
1V/div AC
5us/div

E8 7013-9



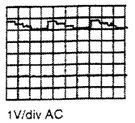
2V/div AC
5us/div

E16 7016-3



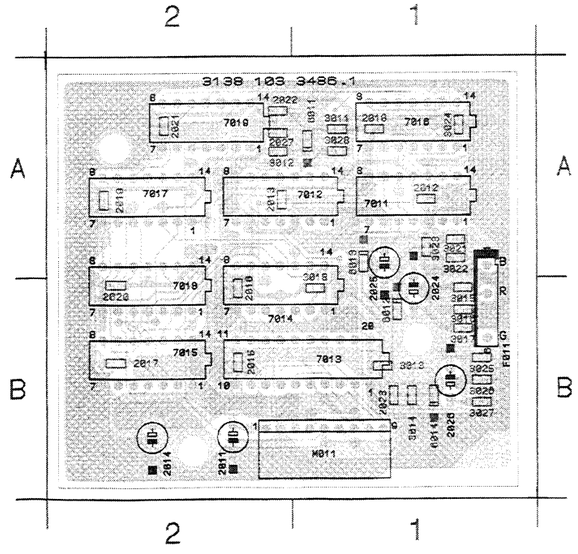
2V/div AC
5us/div

E24 7011-9



1V/div AC
5us/div

F811 A 1	2816 A 2	2823 B 1	3813 B 1	3822 A 1	5811 A 1	7014 B 1	
M811 B 2	2817 B 2	2824 B 1	3814 B 1	3823 A 1	5812 B 1	7015 B 2	
2811 B 2	2818 A 1	2825 A 1	3815 B 1	3824 A 1	5813 A 1	7016 A 1	
2812 A 1	2819 A 2	2826 B 1	3816 B 1	3825 B 1	5814 B 1	7017 A 2	
2813 A 2	2820 B 2	2827 A 2	3817 B 1	3826 B 1	7011 A 1	7018 B 2	
2814 B 2	2821 A 2	3811 A 1	3818 B 1	3827 B 1	7012 A 1	7019 A 2	
2815 B 2	2822 A 2	3812 A 2	3821 A 1	3828 A 1	7013 B 1		



10. Repair tips

0. Warning

All ICs and many other semi-conductors are susceptible to electrostatic discharges (ESD). Careless handling during repair can reduce life drastically. When repairing, make sure that you are connected with the same potential as the mass of the unit via a wrist wrap with resistance. Keep components and tools also at the same potential !

1. Servicing of SMDs (Surface Mounted Devices)

1.1 General cautions on handling and storage
- Oxidation on the terminals of SMDs results in poor soldering. Do not handle SMDs with bare hands.
- Avoid using storage places that are sensitive to oxidation such as places with sulphur or chlorine gas, direct sunlight, high temperatures or a high degree of humidity. The capacitance or resistance value of the SMDs may be affected by this.
- Rough handling of circuit boards containing SMDs may cause damage to the components as well as the circuit boards. Circuit boards containing SMDs should never be bent or flexed. Different circuit board materials expand and contract at different rates when heated or cooled and the components and/or solder connections may be damaged due to the stress. Never rub or scrape chip components as this may cause the value of the component to change. Similarly, do not slide the circuit board across any surface.

1.2 Removal of SMDs
- Heat the solder (for 2-3 seconds) at each terminal of the chip. By means of litz wire and a slight horizontal force, small components can be removed with the soldering iron. They can also be removed with a solder sucker (see Fig. 10.1A)

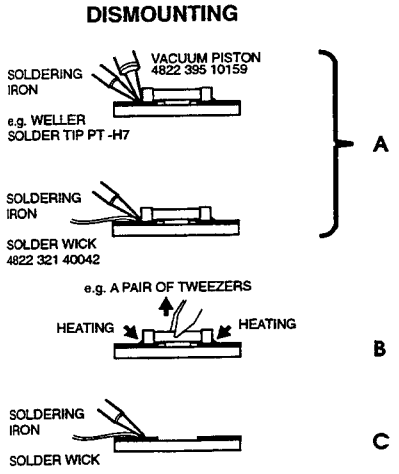


Fig. 10.1

- While holding the SMD with a pair of tweezers, take it off gently using the soldering iron's heat applied to each terminal (see Fig. 10.1 B).
- Remove the excess solder on the solder lands by means of litz wire or a solder sucker (see Fig. 10.1C).

1.3 Caution on removal
- When handling the soldering.iron. use suitable pressure and be careful.
- When removing the chip, do not use undue force with the pair of tweezers.
- The soldering iron to be used (approx. 30 W) should preferably be equipped with a thermal control (soldering temperature: 225 to 250 °C).
- The chip, once removed, must never be reused.

1.4 Attachment of SMDs
- Locate the SMD on the solder lands by means of tweezers and solder the component on one side. Ensure that the component is positioned correctly on the solder lands (see Fig. 10.2A).
- Next complete the soldering of the terminals of the component (see Fig. 10.2B).

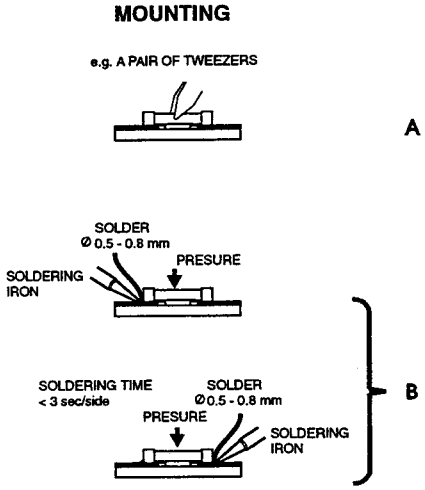


Fig. 10.2

2. Caution when attaching SMDs

- When soldering the SMD terminals, do not touch them directly with the soldering iron. The soldering should be done as quickly as possible, care must be taken to avoid damage to the terminals of the SMDs themselves.
- Keep the SMD's body in contact with the printed board when soldering.
- The soldering iron to be used (approx. 30 W) should preferably be equipped with a thermal control (soldering temperature: 225 to 250 °C).
- Soldering should not be done outside the solder land.
- Soldering flux (of rosin) may be used, but should not be acidic.
- After soldering, let the SMD cool down gradually at room temperature.
- The quantity of solder must be proportional to the size of the solder land. If the quantity is too great, the SMD might crack or the solder lands might be torn loose from the printed board (see Fig. 10.3).

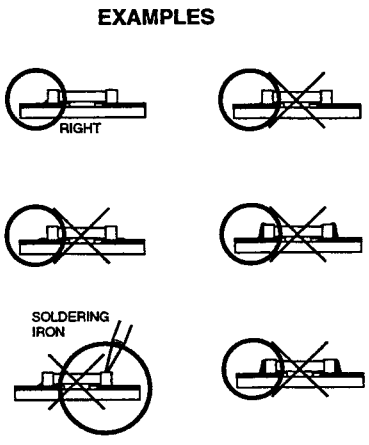
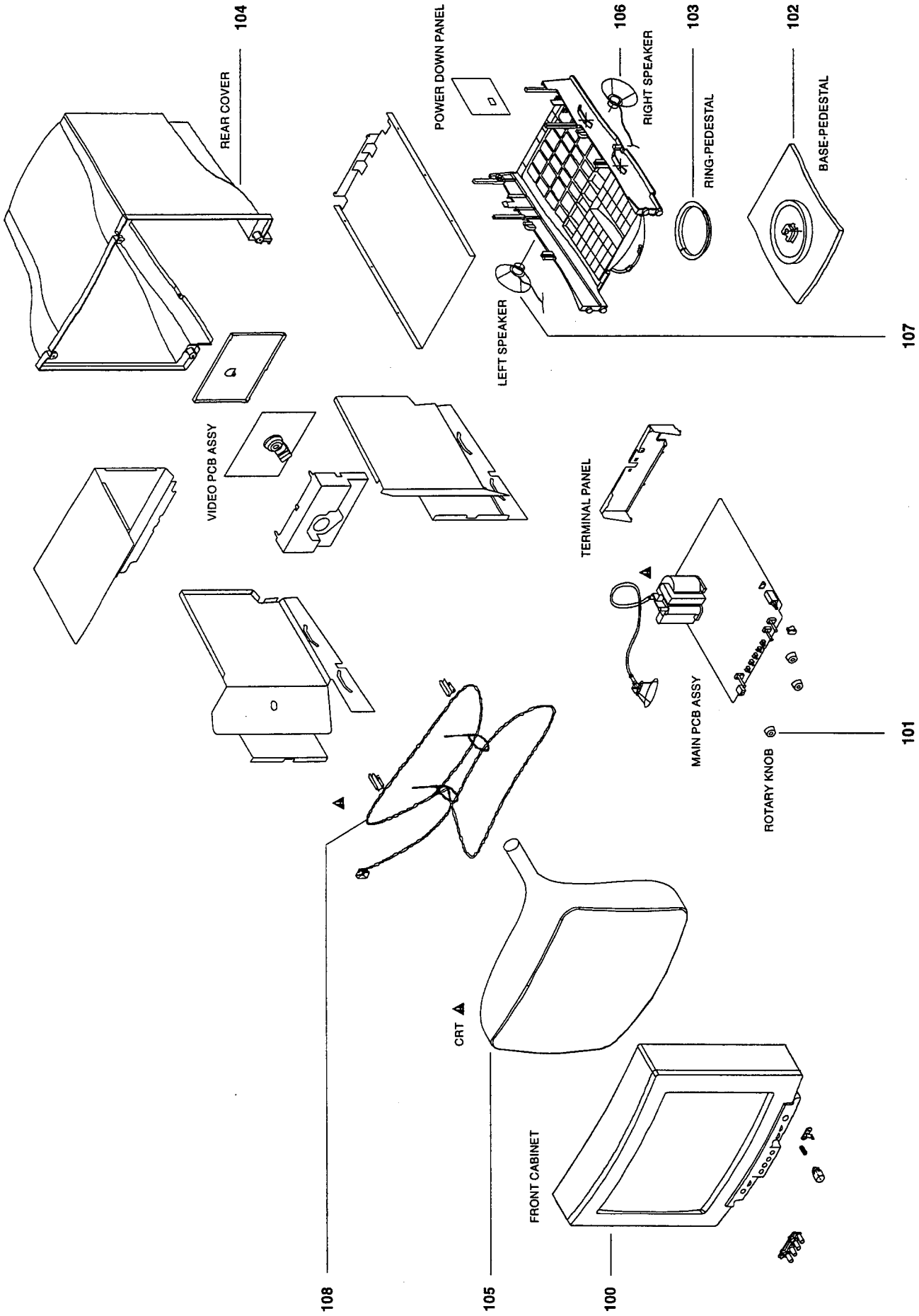


Fig. 10.3

11. Explode view



12. Spare parts list

Parts indicated on exploded view

100▲	4822 430 10502	FRONT CABINET ASSY
101	4822 413 41889	ROTARY KNOB
102	4822 462 10589	BASE-PEDESTAL
103	4822 532 52659	RING-PEDESTAL
104	4822 438 10481	COVER,REAR
105▲	4822 131 20647	CRT 17" .26MM M41LAC970X
106	4822 240 30642	SPEAKER 1W/25
107	4822 240 30642	SPEAKER 1W/25
▲	4822 430 10498	FRONT CABINET
	4822 381 11566	LENS-POWER
	4822 410 63661	POWER PUSH BUTTON
	4822 410 63662	KNOB-FUNCTION
	4822 492 71179	SPRING P/K
	4822 462 42033	PU-PAD
	4822 157 71508	COIL-BEAD 100MHz
	4822 736 60266	DFU, ON PAPER
	4822 701 20079	BAG(INS. BOOK)
	4822 600 70801	BOX,CARTON(L.E . TYPE)
	4822 701 12903	BAG,DUST
108▲	4822 157 71486	DEGAUSSING COIL

Accessories

	4822 321 62261	AUDIO CABLE
	4822 321 62894	INTERFACE CABLE
	4822 321 61241	I/F CABLE 5BNC-15D
	4822 263 50215	APPLE SWITCHABLE ADAPTOR
	4822 736 60267	DFU OF APPLE ADAPTOR
	4822 263 50215	ADAPTOR
1219▲	4822 321 10982	MAINS CORD

1102 Main panel

Various

	4822 265 30375	4P(M501)
	4822 265 41475	10P(M205)
	4822 492 71337	SPRING(FUSE HOLDER)
	4822 265 30891	2P(M108)
	4822 265 10286	2P(M384)
	4822 267 31838	2P(M383,RED)
	5322 390 20011	SILICON GREASE DC4
	4822 265 31077	AC INLET
	4822 267 31525	CONNECTOR
	4822 502 21358	SCREW W/SPRING WASHER
	4822 276 11504	POWER SWITCH
	4822 267 31526	EARPHONE JACK
	4822 276 13467	SWITCH TACT 1P 50MA
	4822 265 31231	3P MALE(M207)
	5322 255 44217	40-DIP-S-LO(IC SOCKET)
	5322 255 40958	8-DIP-S-LC
	4822 265 31209	3P(M105)
1101▲	4822 070 34002	FUSE T4AH 250V
1120	4822 280 70378	RELAY
1201	4822 242 81162	KD0037FCA
1210	4822 209 90113	87C52 WITH PROGR.

⊣⊢

2001	4822 122 33535	4.7nF 20% 400V
2101	5322 121 44212	1µF 10% 275B
2102▲	4822 122 33535	4.7nF 20% 400V
2103▲	4822 122 33535	4.7nF 20% 400V
2104	4822 121 70556	47nF 20% 250V
2105	4822 124 42159	330µF 20% 400V
2106	4822 121 70556	47nF 20% 250V
2107	4822 126 10206	2.2nF 10% 500V
2108	4822 126 10206	2.2nF 10% 500V
2109	4822 126 11382	1nF 10% 1KV
2111	4822 126 10206	2.2nF 10% 500V
2112	4822 121 70565	1nF 100V
2114	4822 124 22669	1µF 20% 50V
2115	4822 121 43696	100nF 100V
2116	4822 124 40198	470µF 20% 16V
2117	5322 122 32334	220pF 10% 100V
2118	4822 122 33496	100nF 10% 63V
2119	4822 124 42149	220µF 20% 25V
2120	5322 124 41817	220µF 16V
2121	4822 124 80834	100µF 20% 250V
2122	4822 122 33654	100pF 1KV
2123	4822 124 80538	220µF 20% 100V
2124	4822 122 33646	470pF 10% 500V
2125	4822 124 80721	1000µF 35V
2127	4822 124 42149	220µF 20% 25V
2128	4822 121 43912	33nF 10% 100V
2129	4822 124 42173	220µF 35V
2131	4822 122 33646	470pF 10% 500V
2132	4822 126 13316	33nF 100V
2133	4822 122 33646	470pF 10% 500V
2134	4822 124 80721	1000µF 35V
2135	4822 124 41659	4.7µF 20% 25V
2136	4822 124 80721	1000µF 35V
2137	4822 124 42136	10µF 25V
2138	4822 124 41659	4.7µF 20% 25V
2142▲	4822 122 33535	4.7nF 20% 400V
2143	4822 124 22669	1µF 20% 50V
2148	4822 122 33968	1nF 5% 500V
2149	4822 121 70556	47nF 20% 250V
2150	5322 122 32335	330pF 10% 100V
2151	4822 124 42177	47µF 16V
2152	4822 121 70556	47nF 20% 250V
2153	4822 121 43694	22nF 100V
2154	4822 121 43693	10nF 100V
2198	4822 124 80721	1000µF 35V
2201	4822 122 33496	100nF 10% 63V
2202	4822 126 10324	33pF 2% 63V
2203	4822 126 10324	33pF 2% 63V
2204	4822 124 41659	4.7µF 20% 25V
2205	4822 124 80132	47µF 20% 25V
2206	4822 124 22686	10µF 16V
2207	4822 122 33496	100nF 10% 63V
2208	4822 122 33643	100pF 10% 50V
2210	4822 122 33496	100nF 10% 63V
2301	4822 122 31765	100pF 2% 63V
2302	4822 122 31773	560pF 2% 63V
2303	4822 122 33496	100nF 10% 63V
2304	4822 124 22679	22µF 20% 16V
2305	5322 122 31647	1nF 10% 63V
2306	4822 126 11456	330nF 10% 63V
2307	4822 122 31784	4.7nF 10% 50V
2308	4822 121 70616	1N8 100V
2309	4822 122 33496	100nF 10% 63V
2310	4822 124 80132	47µF 20% 25V
2312	4822 126 12075	680pF 2% 63V
2331	4822 122 33496	100nF 10% 63V
2333	4822 124 42145	100µF 20% 25V
2334	4822 124 42145	100µF 20% 25V
2341	5322 122 32072	33pF 2% 100V
2342	4822 122 31771	390pF 2% 63V
2343	4822 124 22681	47µF 20% 16V
2344	4822 124 22681	47µF 20% 16V
2345	5322 122 32072	33pF 2% 100V
2346	4822 122 33496	100nF 10% 63V
2347	4822 124 22669	1µF 20% 50V
2351	4822 121 43908	47nF 10% 250V
2352	4822 121 43908	47nF 10% 250V
2353	4822 124 22669	1µF 20% 50V
2354	4822 121 43908	47nF 10% 250V
2355	4822 121 43908	47nF 10% 250V
2380	5322 122 31647	1nF 10% 63V
2381	5322 122 31647	1nF 10% 63V
2382	4822 124 42172	1000µF 16V
2383	5322 122 31647	1nF 10% 63V
2384	5322 122 31647	1nF 10% 63V
2385	4822 121 43696	100nF 100V
2386	4822 121 43696	100nF 100V
2387	4822 124 22681	47µF 20% 16V
2388	4822 122 33496	100nF 10% 63V
2389	4822 122 33496	100nF 10% 63V
2401	4822 121 70106	100nF 5% 100V
2402	4822 124 22686	10µF 16V
2403	4822 124 22669	1µF 20% 50V
2405	4822 122 31797	22nF 10% 63V
2406	5322 121 51214	680pF 1% 400V
2407	4822 124 41659	4.7µF 20% 25V
2408	4822 124 40763	2.2µF 100 V
2409	4822 121 70495	10nF 2% 100V
2410	4822 121 70453	1.2nF 5% 100V
2411	4822 126 12038	68pF 2% 63V
2412	4822 121 43713	330nF 100V
2413	4822 124 22669	1µF 20% 50V
2414	4822 124 22681	47µF 20% 16V
2415	4822 124 22678	100µF 20% 16V
2416	4822 124 22681	47µF 20% 16V
2417	4822 122 33496	100nF 10% 63V
2418	4822 124 22669	1µF 20% 50V
2419	4822 124 41996	470µF 20% 35V
2420	4822 122 33496	100nF 10% 63V
2422	4822 124 80132	47µF 20% 25V
2423	4822 124 42144	470µF 63V
2424	4822 124 22336	100µF 20% 40V
2425	4822 121 43696	100nF 100V
2426	4822 121 70493	5.6nF 5% 100V
2427	4822 122 31765	100pF 2% 63V
2428	4822 122 31781	1500pF 10% 50V
2429	4822 124 22669	1µF 20% 50V
2430	4822 122 32442	10nF 50V
2431	4822 124 22669	1µF 20% 50V
2461	4822 122 31765	100pF 2% 63V
2462	4822 122 33496	100nF 10% 63V
2463	4822 124 22669	1µF 20% 50V
2471	4822 124 22686	10µF 16V
2472	4822 122 32442	10nF 50V
2474	4822 124 22681	47µF 20% 16V
2475	4822 126 11456	330nF 10% 63V
2476	4822 124 42199	22µF 20% 50V
2477	4822 126 11456	330nF 10% 63V
2478	4822 122 32442	10nF 50V
2479	4822 124 42136	10µF 25V
2480	4822 124 22681	47µF 20% 16V
2481	4822 122 32442	10nF 50V
2482	4822 122 32442	10nF 50V
2483	4822 124 22686	10µF 16V
2484	4822 124 22679	22µF 20% 16V
2486	4822 124 42031	2.2µF 20% 25V
2491	4822 122 32442	10nF 50V
2492	4822 122 32442	10nF 50V
2493	4822 124 22686	10µF 16V
2495	4822 124 22679	22µF 20% 16V
2501	4822 122 33481	1800pF 2% 63V
2502	4822 121 70495	10nF 2% 100V
2503	4822 124 22681	47µF 20% 16V
2504	4822 124 42136	10µF 25V
2561	4822 124 80132	47µF 20% 25V
2562	4822 124 80132	47µF 20% 25V
2563	4822 121 43696	100nF 100V
2564	4822 124 80834	100µF 20% 250V
2566	4822 126 13249	150pF 10% Y5P 500V
2567	4822 124 22681	47µF 20% 16V
2568	4822 124 22681	47µF 20% 16V
2571	4822 122 31797	22nF 10% 63V
2572	4822 121 43916	330nF 10% 250V
2573	4822 121 42004	10nF 10% 400V
2574	4822 126 11456	330nF 10% 63V
2575	4822 126 10206	2.2nF 10% 500V
2576	4822 122 33496	100nF 10% 63V
2601	4822 121 70439	2.2nF 5% 100V
2602	4822 124 22681	47µF 20% 16V
2603	4822 122 31766	120pF 2% 63V
2604	5322 122 33446	3.3nF 10% 63V
2605	4822 124 41996	470µF 20% 35V
2606	4822 122 33496	100nF 10% 63V
2608	5322 122 31647	1nF 10% 63V
2609	4822 121 43696	100nF 100V
2611	4822 124 22669	1µF 20% 50V
2612	5322 122 32336	560pF 10% 100V
2613	4822 126 13316	33nF 100V
2614	4822 121 43694	22nF 100V
2616	4822 122 33496	100nF 10% 63V
2618	4822 124 23539	10µF 20% 50V
2619	4822 124 40755	100µF 20% 100V
2621	4822 124 80132	47µF 20% 25V
2622	4822 126 13469	330pF 10% Y5B 2KV
2623	4822 126 13316	33nF 100V
2624	4822 121 70492	2.2nF 5% 630V
2625	4822 121 70492	2.2nF 5% 630V
2626	4822 121 70439	2.2nF 5% 100V
2627	4822 122 31774	56pF 2% 63V
2641	4822 124 42155	4.7µF 250V
2642	4822 124 42155	4.7µF 250V
2643	4822 121 40336	47nF 10% 250V
2644	4822 121 70301	1µF 100V
2651	4822 124 22681	47µF 20% 16V
2652	4822 124 41659	4.7µF 20% 25V
2653	4822 121 70301	1µF 100V
2655	4822 124 42357	33µF 25V
2661	4822 124 42162	1µF 160V
2662	4822 122 33646	470pF 10% 500V
2663	4822 122 33496	100nF 10% 63V
2664	4822 126 12267	470pF 10%R(HR) 2KV
2665	4822 126 12651	10nF 20% 2K
2666	4822 121 70147	3.9nF 5% 1.6KV
2667	4822 126 12267	470pF 10%R(HR) 2KV
2671	4822 122 33496	100nF 10% 63V
2672	4822 122 33496	100nF 10% 63V
2673	4822 121 70412	270nF 5% 250V
2674	4822 121 70469	750nF 5% 250V
2675	4822 121 70413	470nF 5% 250V
2676	4822 121 70443	180nF 5% 250V
2677	4822 121 70241	120nF 5% 250V
2682	4822 126 12267	470pF 10%R(HR) 2KV
2684	4822 121 51173	CAP.FOIL
2685	4822 121 43911	47nF 10% 630V
2882	4822 124 22669	1µF 20% 50V
2885	4822 124 22669	1µF 20% 50V

⊣□⊢

3101	4822 053 21514	510k 5% 0.5W
3102	4822 050 21002	1k 1% 0.6W
3103	4822 117 11567	15k 5% 5W
3104	4822 050 24704	470k 1% 0.6W
3105	4822 050 24704	470k 1% 0.6W
3108	4822 116 30425	7Ω 15%
3109	4822 117 11568	680Ω 5% 5W
3110	4822 050 21804	180k 1% 0.6W
3111	4822 050 22202	2k2 1% 0.6W
3112	4822 050 21001	100Ω 1% 0.6W
3114	4822 116 83004	33Ω 10% 0.5W
3115	4822 117 11618	0Ω39 5% 1W
3116	4822 117 11618	0Ω39 5% 1W
3117	4822 050 11002	1k 1% 0.4W
3118	4822 050 24703	47k 1% 0.6W
3119	4822 051 10102	1k 2% 0.25W
3120	4822 050 21004	100k 1% 0.6W
3122	4822 050 11204	120k 1% 0.4W
3123	4822 050 22702	2k7 1% 0.6W
3124	4822 116 52271	33k 5% 0.5W
3125	4822 053 11101	100Ω 5% 2W
3126	4822 050 11504	150k 1% 0.4W
3127	4822 050 21502	1k5 1% 0.6W
3128▲	4822 052 10229	22Ω 5% 0.33W
3129	4822 050 26809	68Ω 1% 0.6W
3130	4822 050 21008	1Ω 1% 0.6W
3132	4822 116 83037	1Ω2 5% 1W
3133	4822 116 83037	1Ω2 5% 1W
3134	4822 050 23309	33Ω 1% 0.6W
3135	4822 050 22208	2Ω2 1% 0.6W
3136▲	4822 052 10109	10Ω 5% 0.33W
3141	4822 050 15119	51Ω1 1% 0.4W
3146	4822 050 22702	2k7 1% 0.6W
3147	4822 050 22709	27Ω 1% 0.6W
3148	4822 050 21809	18Ω 1% 0.6W
3149	4822 050 22709	27Ω 1% 0.6W
3152	4822 051 10473	47k 2% 0.25W
3153	4822 051 10473	47k 2% 0.25W
3166	4822 051 10472	4k7 2% 0.25W
3167	4822 051 10473	47k 2% 0.25W
3168	4822 050 25609	56Ω 1% 0.6W
3169	4822 116 40265	12Ω PTC 25% 276V
3171▲	4822 052 11108	1Ω 5% 0.5W
3178	4822 051 10104	100k 2% 0.25W
3181	4822 050 21004	100k 1% 0.6W
3182	4822 050 25603	56k 1% 0.6W
3183	4822 050 21802	1k8 1% 0.6W
3184	4822 101 10927	470Ω
3185	4822 051 10154	150k 2% 0.25W
3186	4822 050 24701	470Ω 1% 0.6W
3187	4822 051 10683	68k 2% 0.25W
3188	4822 051 10181	180Ω 2% 0.25W
3189	4822 050 21502	1k5 1% 0.6W
3191	4822 050 23301	330Ω 1% 0.6W
3201	4822 051 10223	22k 2% 0.25W
3202	4822 051 10103	10k 2% 0.25W
3203	4822 051 10103	10k 2% 0.25W
3204	4822 051 10479	47Ω 2% 0.25W
3205	4822 051 10479	47Ω 2% 0.25W
3206	4822 051 10479	47Ω 2% 0.25W
3207	4822 051 10472	4k7 2% 0.25W
3208	4822 051 10472	4k7 2% 0.25W
3209	4822 051 10103	10k 2% 0.25W
3210	4822 051 10472	4k7 2% 0.25W
3211	4822 050 24709	47Ω 1% 0.6W
3212	4822 051 10479	47Ω 2% 0.25W
3213	4822 051 10479	47Ω 2% 0.25W
3214	4822 050 24709	47Ω 1% 0.6W
3215	4822 050 24709	47Ω 1% 0.6W
3216	4822 050 24709	47Ω 1% 0.6W
3217	4822 051 10479	47Ω 2% 0.25W
3218	4822 051 10479	47Ω 2% 0.25W
3219	4822 051 10479	47Ω 2% 0.25W
3221	4822 051 10472	4k7 2% 0.25W
3222	4822 051 10472	4k7 2% 0.25W
3223	4822 051 10472	4k7 2% 0.25W
3224	4822 051 10472	4k7 2% 0.25W
3226	4822 051 10479	47Ω 2% 0.25W
3227	4822 051 10479	47Ω 2% 0.25W

3228	4822 051 10479	47Ω 2% 0.25W
3229	4822 051 10102	1k 2% 0.25W
3231	4822 051 10102	1k 2% 0.25W
3232	4822 051 10102	1k 2% 0.25W
3233	4822 051 10102	1k 2% 0.25W
3234	4822 051 10479	47Ω 2% 0.25W
3235	4822 051 10479	47Ω 2% 0.25W
3236	4822 051 10479	47Ω 2% 0.25W
3237	4822 050 24709	47Ω 1% 0.6W
3238	4822 050 24709	47Ω 1% 0.6W
3239	4822 051 10102	1k 2% 0.25W
3241	4822 050 21003	10k 1% 0.6W
3242	4822 050 21001	100Ω 1% 0.6W
3243	4822 051 10472	4k7 2% 0.25W
3244	4822 051 10472	4k7 2% 0.25W
3245	4822 051 10472	4k7 2% 0.25W
3246	4822 051 10472	4k7 2% 0.25W
3247	4822 051 10472	4k7 2% 0.25W
3248	4822 050 24709	47Ω 1% 0.6W
3249	4822 051 10479	47Ω 2% 0.25W
3251	4822 051 10472	4k7 2% 0.25W
3252	4822 051 10472	4k7 2% 0.25W
3253	4822 051 10472	4k7 2% 0.25W
3255	4822 051 10472	4k7 2% 0.25W
3256	4822 051 10472	4k7 2% 0.25W
3301	4822 051 20222	2k2 5% 0.1W
3302	4822 051 10152	1k5 2% 0.25W
3303	4822 051 20222	2k2 5% 0.1W
3304	4822 051 10223	22k 2% 0.25W
3305	4822 051 10562	5k6 2% 0.25W
3306	4822 051 10103	10k 2% 0.25W
3307	4822 051 10682	6k8 2% 0.25W
3308	4822 051 10103	10k 2% 0.25W
3309	4822 051 10103	10k 2% 0.25W
3311	4822 051 10105	1M 5% 0.25W
3312	4822 051 10822	8k2 2% 0.25W
3313	4822 050 11002	1k 1% 0.4W
3314	4822 051 10102	1k 2% 0.25W
3315	4822 050 11503	15k 1% 0.4W
3316	4822 050 21003	10k 1% 0.6W
3317	4822 051 10472	4k7 2% 0.25W
3318▲	4822 052 11478	4Ω7 5% 0.5W
3319	4822 051 10272	2k7 2% 0.25W
3321	4822 051 10331	330Ω 2% 0.25W
3322	4822 051 10182	1k8 2% 0.25W
3323	4822 051 10102	1k 2% 0.25W
3324	4822 051 10124	120k 2% 0.25W
3325	4822 116 80678	10k 1%
3326	4822 050 23002	3k 1% 0.6W
3328	4822 051 10105	1M 5% 0.25W
3329	4822 051 10102	1k 2% 0.25W
3330	4822 050 22202	2k2 1% 0.6W
3331	4822 050 21801	180Ω 1% 0.6W
3332	4822 050 24701	470Ω 1% 0.6W
3333	4822 050 21801	180Ω 1% 0.6W
3334	4822 051 10103	10k 2% 0.25W
3335	4822 051 10563	56k 2% 0.25W
3336	4822 051 10223	22k 2% 0.25W
3337	4822 050 21003	10k 1% 0.6W
3338	4822 051 10102	1k 2% 0.25W
3340	4822 051 10008	0Ω 5% 0.25W
3341	4822 051 20222	2k2 5% 0.1W
3342	4822 051 10472	4k7 2% 0.25W
3343	4822 051 10103	10k 2% 0.25W
3344	4822 051 10103	10k 2% 0.25W
3345	4822 051 10103	10k 2% 0.25W
3346	4822 051 10102	1k 2% 0.25W
3347	4822 051 10103	10k 2% 0.25W
3348	4822 050 22001	200Ω 1% 0.6W
3349	4822 051 20222	2k2 5% 0.1W
3350	4822 051 10223	22k 2% 0.25W
3351	4822 051 20222	2k2 5% 0.1W
3352	4822 051 10472	4k7 2% 0.25W
3353	4822 051 10223	22k 2% 0.25W
3354	4822 050 22203	22k 1% 0.6W
3355	4822 051 10103	10k 2% 0.25W
3356	4822 051 10473	47k 2% 0.25W
3357	4822 050 21003	10k 1% 0.6W
3358	4822 051 10104	100k 2% 0.25W
3359	4822 051 10102	1k 2% 0.25W
3361	4822 051 10103	10k 2% 0.25W
3362	4822 051 10473	47k 2% 0.25W
3363	4822 050 21003	10k 1% 0.6W
3364	4822 051 10104	100k 2% 0.25W
3365	4822 051 10102	1k 2% 0.25W
3366	4822 051 10103	10k 2% 0.25W
3367	4822 051 10473	47k 2% 0.25W
3368	4822 050 21003	10k 1% 0.6W
3369	4822 051 10104	100k 2% 0.25W
3371	4822 051 10102	1k 2% 0.25W
3372	4822 051 10104	100k 2% 0.25W
3373	4822 051 10102	1k 2% 0.25W
3374	4822 050 21003	10k 1% 0.6W
3375	4822 051 10103	10k 2% 0.25W
3376	4822 051 10473	47k 2% 0.25W
3377	4822 050 22203	22k 1% 0.6W
3378	4822 051 10223	22k 2% 0.25W
3381	4822 050 24708	4Ω7 1% 0.6W
3383	4822 050 21009	10Ω 1% 0.6W
3384	4822 101 21237	10kB
3385	4822 051 10759	75Ω 2% 0.25W
3386	4822 051 10759	75Ω 2% 0.25W
3387	4822 050 21009	10Ω 1% 0.6W
3388	4822 051 10223	22k 2% 0.25W
3389	4822 051 10223	22k 2% 0.25W
3391	4822 101 21255	20k 30% 0.3W
3392	4822 051 10472	4k7 2% 0.25W
3393	4822 051 10472	4k7 2% 0.25W
3394	4822 051 10103	10k 2% 0.25W
3395	4822 051 10103	10k 2% 0.25W
3396	4822 051 10103	10k 2% 0.25W
3397	4822 051 10103	10k 2% 0.25W
3401	4822 051 20183	18k 5% 0.1W
3402	4822 116 52234	100k 5% 0.5W
3403	4822 051 20183	18k 5% 0.1W
3404	4822 051 10103	10k 2% 0.25W
3405	4822 051 10513	51k 2% 0.25W
3406	4822 051 10223	22k 2% 0.25W
3407	4822 051 10154	150k 2% 0.25W
3408	4822 051 10184	180k 2% 0.25W
3409	4822 051 10104	100k 2% 0.25W
3410	4822 051 10104	100k 2% 0.25W
3411	4822 116 80678	10k 1%
3412	4822 050 23902	3k9 1% 0.6W
3413	4822 051 10393	39k 2% 0.25W
3414	4822 051 10332	3k3 2% 0.25W
3415	4822 050 22003	20k 1% 0.6W
3416	4822 050 21801	180Ω 1% 0.6W
3417	4822 051 10473	47k 2% 0.25W
3418	4822 117 11641	12k
3419	4822 052 11828	8Ω2 5% 0.5W
3420	4822 051 10154	150k 2% 0.25W
3421	4822 051 10272	2k7 2% 0.25W
3422	4822 051 10822	8k2 2% 0.25W
3423	4822 051 10102	1k 2% 0.25W
3424	4822 051 10683	68k 2% 0.25W
3425	4822 051 10394	390k 2% 0.25W
3426	4822 051 10103	10k 2% 0.25W
3427	4822 050 21001	100Ω 1% 0.6W
3428▲	4822 052 11228	2Ω2 5% 0.5W
3429	4822 051 10471	470Ω 2% 0.25W
3430	4822 050 11002	1k 1% 0.4W
3431	4822 051 10102	1k 2% 0.25W
3432	4822 050 21003	10k 1% 0.6W
3433	4822 051 10563	56k 2% 0.25W
3434	4822 116 52207	1k2 5% 0.5W
3435	4822 051 10103	10k 2% 0.25W
3436	4822 050 23309	33Ω 1% 0.6W
3437▲	4822 052 11828	8Ω2 5% 0.5W
3438▲	4822 052 11828	8Ω2 5% 0.5W
3439	4822 050 23309	33Ω 1% 0.6W
3440	4822 050 21203	12k 1% 0.6W
3441	4822 050 21003	10k 1% 0.6W
3442	4822 050 23309	33Ω 1% 0.6W
3443	4822 050 23301	330Ω 1% 0.6W
3444	4822 050 22202	2k2 1% 0.6W
3445	4822 051 10203	20k 2% 0.25W
3446	4822 051 10123	12k 2% 0.25W
3447	4822 050 22201	220Ω 1% 0.6W
3448	4822 051 10123	12k 2% 0.25W
3449	4822 050 22202	2k2 1% 0.6W
3450	4822 050 13902	3k9 1% 0.4W
3451	4822 051 20183	18k 5% 0.1W
3452	4822 050 11002	1k 1% 0.4W
3453	4822 050 11002	1k 1% 0.4W
3454	4822 051 10362	3k6 2% 0.25W
3455	4822 050 24702	4k7 1% 0.6W
3456	4822 050 14703	47k 1% 0.4W
3457	4822 051 10102	1k 2% 0.25W
3458▲	4822 052 11228	2Ω2 5% 0.5W
3459	4822 051 10123	12k 2% 0.25W
3460	4822 050 22202	2k2 1% 0.6W
3461	4822 051 20222	2k2 5% 0.1W
3462	4822 051 20222	2k2 5% 0.1W
3463	4822 051 10152	1k5 2% 0.25W
3464	4822 050 23302	3k3 1% 0.6W
3465	4822 051 10332	3k3 2% 0.25W
3466	4822 051 10224	220k 2% 0.25W
3467	4822 050 22202	2k2 1% 0.6W
3468	4822 051 20222	2k2 5% 0.1W
3469	4822 100 11391	330Ω 30%lin 0.1W
3470	4822 050 11002	1k 1% 0.4W
3471	4822 051 20222	2k2 5% 0.1W
3472	4822 051 10683	68k 2% 0.25W
3473	4822 051 10393	39k 2% 0.25W
3474	4822 051 10102	1k 2% 0.25W
3475	4822 051 10821	820Ω 2% 0.25W
3476	4822 051 10102	1k 2% 0.25W
3477	4822 051 10563	56k 2% 0.25W
3478	4822 051 10273	27k 2% 0.25W
3479	4822 051 10472	4k7 2% 0.25W
3480	4822 051 10332	3k3 2% 0.25W
3481	4822 051 10563	56k 2% 0.25W
3482	4822 051 10393	39k 2% 0.25W
3485	4822 051 10472	4k7 2% 0.25W
3486	4822 051 10393	39k 2% 0.25W
3487	4822 050 22003	20k 1% 0.6W
3488	4822 050 23603	36k 1% 0.6W
3489	4822 051 10561	560Ω 2% 0.25W
3490	4822 051 10332	3k3 2% 0.25W
3491	4822 051 10102	1k 2% 0.25W
3492	4822 051 10122	1k2 2% 0.25W
3493	4822 051 10561	560Ω 2% 0.25W
3494	5322 100 11539	100k 30%lin 0.1W
3495	4822 051 20222	2k2 5% 0.1W
3496	4822 051 20222	2k2 5% 0.1W
3497	4822 051 10102	1k 2% 0.25W
3498	4822 050 22404	240k 1% 0.6W
3499	4822 051 10562	5k6 2% 0.25W
3501	4822 050 21102	1k1 1% 0.6W
3502	4822 050 19102	9k1 1% 0.4W
3504	4822 116 52251	18k 5% 0.5W
3505	4822 050 22202	2k2 1% 0.6W
3506	4822 051 10331	330Ω 2% 0.25W
3509	4822 051 10102	1k 2% 0.25W
3510	4822 050 24703	47k 1% 0.6W
3511	4822 050 25603	56k 1% 0.6W
3512	4822 051 20222	2k2 5% 0.1W
3513	4822 051 10102	1k 2% 0.25W
3514	4822 051 20222	2k2 5% 0.1W
3515	4822 051 10102	1k 2% 0.25W
3516	4822 051 10562	5k6 2% 0.25W
3517	4822 051 10272	2k7 2% 0.25W
3518	4822 051 10822	8k2 2% 0.25W
3519	4822 051 10102	1k 2% 0.25W
3521	4822 051 10562	5k6 2% 0.25W
3522	4822 051 10102	1k 2% 0.25W
3523	4822 051 10103	10k 2% 0.25W
3525	4822 051 20222	2k2 5% 0.1W
3526	4822 051 10102	1k 2% 0.25W
3527	4822 051 20222	2k2 5% 0.1W
3528	4822 051 10102	1k 2% 0.25W
3529	4822 051 10562	5k6 2% 0.25W
3531	4822 051 10272	2k7 2% 0.25W
3532	4822 051 10822	8k2 2% 0.25W
3534	4822 050 25603	56k 1% 0.6W
3535	4822 051 10102	1k 2% 0.25W
3536	4822 051 10822	8k2 2% 0.25W
3537	4822 051 10102	1k 2% 0.25W
3538	4822 051 10103	10k 2% 0.25W
3539	4822 116 52211	150Ω 5% 0.5W
3540	4822 051 10102	1k 2% 0.25W
3542	4822 051 10393	39k 2% 0.25W
3543	4822 051 10331	330Ω 2% 0.25W
3544	4822 051 10471	470Ω 2% 0.25W
3545	4822 051 10471	470Ω 2% 0.25W
3546	4822 051 10471	470Ω 2% 0.25W
3552	4822 050 25603	56k 1% 0.6W
3555	4822 050 23903	39k 1% 0.6W
3556	4822 051 10333	33k 2% 0.25W
3557	4822 051 10393	39k 2% 0.25W
3559▲	4822 052 10828	8Ω2 5% 0.33W
3560	4822 051 10122	1k2 2% 0.25W
3561	4822 050 21002	1k 1% 0.6W
3562	4822 050 21501	150Ω 1% 0.6W
3563	4822 050 21003	10k 1% 0.6W
3564	4822 117 11637	33Ω 5% 5W
3565▲	4822 052 10108	1Ω 5% 0.33W
3566	4822 051 10681	680Ω 2% 0.25W
3567	4822 100 11141	10k 30%lin 0.1W
3568	4822 051 10681	680Ω 2% 0.25W
3569▲	4822 052 10108	1Ω 5% 0.33W
3570▲	4822 052 10108	1Ω 5% 0.33W
3571	4822 050 29102	9k1 1% 0.6W
3572	4822 051 10103	10k 2% 0.25W
3573	4822 050 22203	22k 1% 0.6W
3574	4822 050 21003	10k 1% 0.6W
3575	4822 051 10103	10k 2% 0.25W
3576	4822 050 22202	2k2 1% 0.6W
3577	4822 050 21503	15k 1% 0.6W
3578	4822 050 21503	15k 1% 0.6W
3579	4822 050 24703	47k 1% 0.6W
3581	4822 051 10223	22k 2% 0.25W
3582	4822 050 21003	10k 1% 0.6W
3583	4822 050 21503	15k 1% 0.6W
3584	4822 051 10102	1k 2% 0.25W
3586	4822 051 10103	10k 2% 0.25W
3588	4822 050 16801	680Ω 1% 0.4W
3589	4822 051 10103	10k 2% 0.25W
3591	4822 050 22002	2k 1% 0.6W
3592	4822 116 83042	150Ω 2W
3593	4822 050 21203	12k 1% 0.6W
3594	4822 051 10223	22k 2% 0.25W
3595	4822 051 10333	33k 2% 0.25W
3596	4822 051 10393	39k 2% 0.25W
3601	4822 116 80678	10k 1%
3602	4822 116 80942	4k7 1%
3603	4822 051 10472	4k7 2% 0.25W
3604	4822 050 22709	27Ω 1% 0.6W
3605	4822 050 22702	2k7 1% 0.6W
3607▲	4822 052 11102	1k 5% 0.5W
3609	4822 051 10563	56k 2% 0.25W
3610	4822 050 21001	100Ω 1% 0.6W
3611	4822 050 26803	68k 1% 0.6W
3612	4822 050 21503	15k 1% 0.6W
3613	4822 050 21504	150k 1% 0.6W
3614	4822 050 28201	820Ω 1% 0.6W
3615	4822 051 10472	4k7 2% 0.25W
3616	4822 050 23303	33k 1% 0.6W
3618	4822 051 10104	100k 2% 0.25W
3619	4822 050 21002	1k 1% 0.6W
3620	4822 051 10479	47Ω 2% 0.25W
3621	4822 051 10102	1k 2% 0.25W
3622	4822 051 10472	4k7 2% 0.25W
3624	4822 050 21001	100Ω 1% 0.6W
3625	4822 050 24701	470Ω 1% 0.6W
3626▲	4822 052 11109	10Ω 5% 0.5W
3627	4822 051 10102	1k 2% 0.25W
3628	4822 050 24701	470Ω 1% 0.6W
3629▲	4822 052 11109	10Ω 5% 0.5W
3630▲	4822 052 11828	8Ω2 5% 0.5W
3631	4822 050 21003	10k 1% 0.6W
3632	4822 100 11392	47k 30%lin 0.1W
3633	4822 050 21003	10k 1% 0.6W
3634	4822 117 11531	39Ω 5% 2W
3636	4822 051 10122	1k2 2% 0.25W
3640	4822 051 10689	68Ω 2% 0.25W
3641	4822 116 52289	5k6 5% 0.5W
3642	4822 050 21005	1M 1% 0.6W
3643▲	4822 052 10828	8Ω2 5% 0.33W
3644	4822 050 21201	120Ω 1% 0.6W
3645	4822 050 21804	180k 1% 0.6W
3646	4822 116 82967	68k 0.125
3647	4822 100 11392	47k 30%lin 0.1W
3648	4822 050 21203	12k 1% 0.6W
3649	4822 053 21104	100k 5% 0.5W
3650	4822 050 21503	15k 1% 0.6W
3651	4822 117 11635	1k 0.5W
3652	4822 051 10104	100k 2% 0.25W
3653	4822 050 12702	2k7 1% 0.4W
3654	4822 101 11257	47k 30%LIN
3655	4822 051 10008	0Ω 5% 0.25W
3656	4822 051 10822	8k2 2% 0.25W
3657	4822 051 10822	8k2 2% 0.25W
3658	4822 051 10472	4k7 2% 0.25W
3659	4822 051 10008	0Ω 5% 0.25W
3660	4822 117 10294	1.5Ω 5% 3W
3661	4822 051 10151	150Ω 2% 0.25W
3662	4822 051 10103	10k 2% 0.25W
3663	4822 116 52289	5k6 5% 0.5W
3664	4822 117 11646	1k 5% 3W
3665	4822 050 26802	6k8 1% 0.6W
3667	4822 050 26809	68Ω 1% 0.6W
3668	4822 050 21501	150Ω 1% 0.6W
3671	4822 050 21501	150Ω 1% 0.6W
3672	4822 117 11638	15Ω 2W
3673	4822 051 10152	1k5 2% 0.25W
3674	4822 050 21203	12k 1% 0.6W
3675	4822 051 20183	18k 5% 0.1W
3676	4822 050 21202	1k2 1% 0.6W
3677	4822 051 10102	1k 2% 0.25W
3678	4822 050 21003	10k 1% 0.6W
3679	4822 051 10472	4k7 2% 0.25W
3681	4822 053 21514	510k 5% 0.5W
3682	4822 050 13902	3k9 1% 0.4W
3683	4822 053 21154	150k 5% 0.5W
3684	4822 053 21475	4M7 5% 0.5W
3685	4822 116 52234	100k 5% 0.5W
3686	4822 051 10471	470Ω 2% 0.25W
3687	4822 117 11638	15Ω 2W
3690	4822 051 10123	12k 2% 0.25W
3691	4822 050 21203	12k 1% 0.6W
3692	4822 050 21004	100k 1% 0.6W
3693	4822 116 80556	120k
3694	4822 050 21003	10k 1% 0.6W
3695	4822 051 10334	330k 2% 0.25W
3696▲	4822 052 10228	2Ω2 5% 0.33W
3697	4822 117 11533	30k 1% 0.4W
3698	4822 050 12002	2k 1% 0.4W
3699	4822 116 80941	1k8 1%
3881	4822 051 10152	1k5 2% 0.25W
3882	4822 050 11503	15k 1% 0.4W
3883	4822 050 11503	15k 1% 0.4W
3885	4822 051 10223	22k 2% 0.25W
3891	4822 051 10223	22k 2% 0.25W

3892	4822 101 21238	10kB
3893	4822 051 10472	4k7 2% 0.25W
3894	4822 051 10362	3k6 2% 0.25W
3896	4822 100 11141	10k 30%lin 0.1W

5101	4822 157 10292	14mH
5105▲	4822 146 31459	TRANSF,MAINS
5106	4822 157 70705	COIL
5201	4822 157 63863	3.9µH 10%
5202	4822 157 63863	3.9µH 10%
5301	4822 157 63863	3.9µH 10%
5302	4822 157 63863	3.9µH 10%
5331	4822 157 63211	COIL
5332	4822 157 63211	COIL
5341	4822 157 63863	3.9µH 10%
5403	4822 157 63863	3.9µH 10%
5501	4822 157 63863	3.9µH 10%
5562	4822 148 81272	TRANSFORMER
5563	4822 157 71511	3mH
5564	4822 148 60317	TRANSFORMER
5565	4822 156 21399	COIL
5566	4822 157 71509	6mH
5601	4822 157 63863	3.9µH 10%
5603	4822 157 63863	3.9µH 10%
5621▲	4822 140 10523	L.O.T.
5622	4822 157 71372	COIL,CHOKE
5651	4822 157 63863	3.9µH 10%
5662	4822 142 40346	TRANSF,DRIVER
5671	4822 157 71512	COIL
5672	4822 157 63863	3.9µH 10%
5681	4822 148 81279	TRANSF,DRIVER

6101	5322 130 31931	BZV85-C51
6102	5322 130 31931	BZV85-C51
6103	4822 130 31393	RGP10J
6104	4822 130 31393	RGP10J
6105	4822 130 31393	RGP10J
6106	4822 130 83539	EGP20G
6107	4822 130 31607	RGP10D
6108	4822 130 83794	GBU4K
6111	4822 130 30621	1N4148
6112	4822 130 31607	RGP10D
6113	4822 130 31607	RGP10D
6114	4822 130 31607	RGP10D
6115	4822 130 30621	1N4148
6116	4822 130 30621	1N4148
6118	4822 130 34233	BZX79-C5V1
6119	4822 130 31024	BZX79-B18
6120	4822 130 81062	RGP30D
6121	5322 130 33885	RGP15J
6122	5322 130 33885	RGP15J
6123	4822 130 80572	RGP30J
6124	4822 130 83128	EGP30G
6127	4822 130 34233	BZX79-C5V1
6128	4822 130 83539	EGP20G
6129	5322 130 80285	SB350
6133	4822 130 30621	1N4148
6141	4822 130 80446	BAS32L
6142	4822 130 80446	BAS32L
6146	4822 130 31607	RGP10D
6147	4822 130 30621	1N4148
6148	4822 130 80446	BAS32L
6199	4822 130 83789	L-59YGC
6201	4822 130 80446	BAS32L
6202	4822 130 80446	BAS32L
6203	4822 130 80446	BAS32L
6301	4822 130 80446	BAS32L
6302	4822 130 30621	1N4148
6304	4822 130 80446	BAS32L
6305	4822 130 80446	BAS32L
6306	4822 130 80446	BAS32L
6331	4822 130 80446	BAS32L
6332	4822 130 80446	BAS32L
6334	4822 130 80446	BAS32L
6341	4822 130 80446	BAS32L
6342	4822 130 80446	BAS32L
6343	4822 130 80446	BAS32L
6344	4822 130 80446	BAS32L
6351	4822 130 30621	1N4148
6352	4822 130 30621	1N4148
6353	4822 130 30621	1N4148
6354	4822 130 30621	1N4148
6381	4822 130 31438	1N4001
6382	4822 130 31438	1N4001
6383	4822 130 31438	1N4001
6384	4822 130 31438	1N4001
6406	4822 130 80446	BAS32L
6407	5322 130 31969	RGP15G
6408	4822 130 30621	1N4148
6411	4822 130 34197	BZX79-C12 (COL)
6471	4822 130 80446	BAS32L
6563	4822 130 83128	EGP30G
6564	4822 130 31607	RGP10D
6565	4822 130 31607	RGP10D
6571	4822 130 34233	BZX79-C5V1
6572	4822 130 34257	BZX79-C51 (COL)
6573	4822 130 31878	1N4003
6574	4822 130 80446	BAS32L
6575	4822 130 80446	BAS32L
6576	4822 130 80446	BAS32L
6601	4822 130 31393	RGP10J
6603	4822 130 80446	BAS32L
6604	4822 130 80446	BAS32L
6605	4822 130 80446	BAS32L
6607	4822 130 34278	BZX79-B6V8
6608	4822 130 34233	BZX79-C5V1
6609	4822 130 34278	BZX79-C6V8
6613	4822 130 80446	BAS32L
6621	4822 130 80446	BAS32L
6624	4822 130 83128	EGP30G
6641	4822 130 34685	BZX79-C75 (COL)
6642	4822 130 34685	BZX79-C75 (COL)
6643	4822 130 42489	RGP10G
6644	4822 130 31607	RGP10D
6660	4822 130 31607	RGP10D
6661	4822 130 42489	RGP10G
6662	4822 130 82584	MUR10150E
6663	4822 130 83854	BYV36D
6664	4822 130 83854	BYV36D
6665	4822 130 80446	BAS32L
6682	4822 130 31393	RGP10J
6683	4822 130 31393	RGP10J
6684	4822 130 80446	BAS32L

7101	4822 130 62627	IRFPC50
7102	4822 209 83909	UC3842AN
7103	4822 130 42231	BC557C
7104	4822 130 42231	BC557C
7105	5322 130 42136	BC848C
7106	4822 130 40854	BC327
7107	4822 130 41344	BC337-40
7109	4822 209 80891	MC7805CT
7111	4822 209 81397	TL431CLP
7112	4822 209 81726	MC7812CT
	4822 492 62076	FOR TRANSISTORS
	4822 466 93161	PLATE
	5322 390 20011	VET SILIC.P4 20GR
7114	4822 130 44196	BC548C
7116	4822 130 80908	CNX62A
7118	4822 130 44121	BC338
7119	4822 130 44104	BC328
7141	4822 130 44196	BC548C
7201	4822 209 33394	P87C52EBPN
7202	4822 209 30953	ST24C04CB6
	4822 492 62076	FOR TRANSISTORS
	4822 466 93161	PLATE
	5322 390 20011	VET SILIC.P4 20GR
7203	4822 209 33938	M62358P
7204	5322 130 42756	BC857C
7301	4822 209 10223	HEF4077BP
7302	5322 130 44336	BSV52
7304	4822 130 42513	BC858C
7311	4822 209 80797	LM393N
7312	4822 130 42513	BC858C
7313	5322 130 42136	BC848C
7314	4822 130 42513	BC858C
7331	5322 209 86234	NE5532N
7332	4822 130 44121	BC338
7333	4822 130 44104	BC328
7334	4822 209 70672	LM358N
7341	5322 209 10422	HEF4538BP
7342	5322 130 42136	BC848C
7343	5322 130 60068	BC558C
7344	4822 130 44196	BC548C
7345	5322 130 42136	BC848C
7346	5322 130 42755	BC847C
7347	5322 130 42136	BC848C
7351	5322 130 42136	BC848C
7352	5322 130 42136	BC848C
7353	5322 130 42136	BC848C
7354	5322 130 42136	BC848C
7361	5322 130 60684	IRF540
7362	5322 130 60684	IRF540
7363	5322 130 60684	IRF540
7364	5322 130 60684	IRF540
7381	4822 209 31668	TDA7053
7401	4822 209 90117	TDA9102C
7402	5322 209 86234	NE5532N
7403	4822 209 61117	TDA8172
	4822 492 62076	FOR TRANSISTORS
	4822 466 93161	PLATE
	5322 390 20011	VET SILIC.P4 20GR
7405	5322 130 60068	BC558C
7406	5322 130 42136	BC848C
7408	4822 130 44503	BC547C
7409	5322 130 42755	BC847C
7410	5322 209 10422	HEF4538BP
7411	4822 130 44196	BC548C
7461	5322 130 44336	BSV52
7463	5322 130 42755	BC847C
7471	4822 209 31125	TEA2031A
7472	5322 209 85803	MC1496N
7473	5322 209 85803	MC1496N
7474	5322 209 85803	MC1496N
7475	5322 130 42755	BC847C
7481	5322 130 42136	BC848C
7502	5322 130 42136	BC848C
7503	5322 130 42136	BC848C
7560	5322 130 42755	BC847C
7561	4822 130 44121	BC338
7562	4822 130 44104	BC328
7563	5322 130 62262	IRF730
7564	4822 130 63274	2SC2344E
7565	4822 130 63275	2SA1011E
7566	4822 130 44121	BC338
7567	4822 130 41646	BF423
7569	4822 130 41053	BC639
7601	5322 209 86059	SN74LS221N
7602	4822 209 90116	UC3843AN
7603	5322 130 42756	BC857C
7604	5322 130 42756	BC857C
7605	5322 130 42136	BC848C
7606	5322 130 42756	BC857C
7607	5322 130 42755	BC847C
7608	4822 130 63081	BSN254A
7609	4822 130 63627	BU2527AF
	4822 492 62076	FOR TRANSISTORS
	5322 390 20011	VET SILIC.P4 20GR
7610	5322 130 60068	BC558C
7612	5322 130 42755	BC847C
7613	5322 130 42136	BC848C
7614	4822 130 41053	BC639
7621	4822 130 63081	BSN254A
7622	4822 130 63702	BUK455-400B
7623	4822 130 63703	BUK457-500B
	5322 390 20011	VET SILIC.P4 20GR
7651	5322 130 42136	BC848C
7672	4822 130 42513	BC858C
7673	5322 130 42755	BC847C
7674	4822 130 40823	BD135
7681	5322 130 44918	BUX87

1103 Video panel

Various

1103	4822 212 31791	VIDEO PCB ASSY
	4822 265 31258	5P(M312)
	4822 265 20366	CONNECTOR 1P
	4822 265 41474	7P(M304)
	4822 265 41454	8P(M315)
	4822 265 20707	2P(F301,302,303)
	4822 255 70263	CRT SOCKET
	4822 265 41419	6P(M308)
	4822 265 41416	7P(M316)
	5322 390 20011	VET SILIC.P4 20GR

2701	4822 122 33496	100nF 10% 63V
2702	4822 122 32482	22pF 2% 63V
2703	4822 122 33496	100nF 10% 63V
2704	4822 122 33496	100nF 10% 63V
2705	4822 122 33496	100nF 10% 63V
2706	4822 122 33496	100nF 10% 63V
2707	4822 122 33496	100nF 10% 63V
2708	4822 122 33496	100nF 10% 63V
2710	4822 122 33496	100nF 10% 63V
2712	4822 122 33496	100nF 10% 63V
2713	4822 122 33496	100nF 10% 63V
2714	4822 122 33496	100nF 10% 63V
2715	4822 122 33496	100nF 10% 63V
2716	4822 122 33496	100nF 10% 63V
2717	4822 122 33496	100nF 10% 63V
2718	4822 122 33496	100nF 10% 63V
2719	4822 122 33496	100nF 10% 63V
2720	4822 124 80104	10µF 20% 16V
2721	4822 124 80104	10µF 20% 16V
2722	4822 122 33496	100nF 10% 63V
2723	4822 122 31974	820pF 10% 63V
2724	4822 122 32482	22pF 2% 63V
2725	4822 122 32482	22pF 2% 63V
2726	4822 122 32482	22pF 2% 63V
2727	4822 124 40433	47µF 20% 25V
2728	4822 124 42165	10µF 160V
2729	4822 124 80606	1µF 20% 160V
2731	4822 122 32442	10nF 50V
2732	4822 252 60127	DSP201M
2733	4822 124 80104	10µF 20% 16V
2734	4822 122 33496	100nF 10% 63V
2741	4822 124 80235	10µF 16V
2742	4822 122 31839	82pF 2% 63V
2743	4822 122 31974	820pF 10% 63V
2746	4822 124 40433	47µF 20% 25V
2747	4822 124 42165	10µF 160V
2748	4822 124 80606	1µF 20% 160V
2749	4822 122 33496	100nF 10% 63V
2751	4822 122 32442	10nF 50V
2752	4822 252 60127	DSP201M
2753	4822 124 80235	10µF 16V
2754	4822 122 33496	100nF 10% 63V
2761	4822 124 80235	10µF 16V
2762	4822 122 31974	820pF 10% 63V
2763	4822 122 31767	150pF 2% 63V
2766	4822 124 40433	47µF 20% 25V
2767	4822 124 80606	1µF 20% 160V
2768	4822 124 42165	10µF 160V
2769	4822 122 33496	100nF 10% 63V
2771	4822 122 32442	10nF 50V
2772	4822 252 60127	DSP201M
2773	4822 124 80104	10µF 20% 16V
2801	4822 124 42155	4.7µF 250V
2802	4822 122 33496	100nF 10% 63V
2803	4822 122 32442	10nF 50V
2804	4822 122 32442	10nF 50V
2805	4822 122 31971	10pF 2% 63V
2806	4822 122 33968	1nF 5% 500V
2807	4822 124 80104	10µF 20% 16V
2808	4822 122 32707	3.3nF 10%B 500V
2809	4822 122 33968	1nF 5% 500V
2810	4822 126 12651	10nF 20% 2K
2811	4822 122 33496	100nF 10% 63V
2813	4822 122 32442	10nF 50V
2814	4822 122 33496	100nF 10% 63V
2815	4822 124 42155	4.7µF 250V
2816	4822 122 32707	3.3nF 10%B 500V
2817	4822 124 80104	10µF 20% 16V
2818	4822 126 12075	680pF 2% 63V
2819	4822 126 12075	680pF 2% 63V
2820	4822 122 31772	47pF 2% 63V
2821	4822 122 31772	47pF 2% 63V
2822	4822 122 31772	47pF 2% 63V
2823	4822 122 33496	100nF 10% 63V
2824	4822 122 33496	100nF 10% 63V
2825	4822 122 32442	10nF 50V
2826	4822 122 33496	100nF 10% 63V
2827	4822 122 31727	470pF 2% 63V
2831	4822 124 80104	10µF 20% 16V
2832	4822 122 32442	10nF 50V
2833	4822 122 32442	10nF 50V
2836	4822 122 31765	100pF 2% 63V
2837	4822 122 31765	100pF 2% 63V
2842	4822 122 33496	100nF 10% 63V
2843	4822 124 40433	47µF 20% 25V
2844	4822 124 80104	10µF 20% 16V
2851	4822 122 31971	10pF 2% 63V
2852	4822 122 31971	10pF 2% 63V
2853	4822 122 31971	10pF 2% 63V
2854	4822 122 31971	10pF 2% 63V
2855	4822 122 31971	10pF 2% 63V

3701	4822 050 11002	1k 1% 0.4W
3702	4822 051 10102	1k 2% 0.25W
3703	4822 050 19102	9k1 1% 0.4W
3704	4822 051 20222	2k2 5% 0.1W
3705	4822 050 11002	1k 1% 0.4W
3706	4822 051 10822	8k2 2% 0.25W
3707	4822 051 10472	4k7 2% 0.25W
3708	4822 051 10471	470Ω 2% 0.25W
3709	4822 051 10822	8k2 2% 0.25W
3710	4822 051 10822	8k2 2% 0.25W
3711	4822 051 10759	75Ω 2% 0.25W
3712	4822 050 23309	33Ω 1% 0.6W
3713	4822 051 20222	2k2 5% 0.1W
3714	4822 051 10109	10Ω 2% 0.25W
3715	4822 051 10272	2k7 2% 0.25W

3716	4822 051 10829	82Ω 2% 0.25W	
3717	4822 050 24709	47Ω 1% 0.6W	
3718	4822 051 10109	10Ω 2% 0.25W	
3719	4822 051 10391	390Ω 2% 0.25W	
3720	4822 051 10471	470Ω 2% 0.25W	
3721	4822 050 21009	10Ω 1% 0.6W	
3722	4822 051 10689	68Ω 2% 0.25W	
3723	4822 051 10221	220Ω 2% 0.25W	
3724	4822 050 24709	47Ω 1% 0.6W	
3725	4822 116 90834	180Ω 5%	
3726	4822 116 90834	180Ω 5%	
3727	4822 116 90834	180Ω 5%	
3728	4822 051 10229	22Ω 2% 0.25W	
3729	4822 051 10271	270Ω 2% 0.25W	
3730	4822 051 10339	33Ω 2% 0.25W	
3731	4822 051 10223	22k 2% 0.25W	
3732	4822 050 24703	47k 1% 0.6W	
3733	4822 050 11302	1k3 1% 0.4W	
3734	4822 051 10103	10k 2% 0.25W	
3735	4822 051 20222	2k2 5% 0.1W	
3736	4822 050 21005	1M 1% 0.6W	
3737	4822 050 21504	150k 1% 0.6W	
3738	4822 050 21804	180k 1% 0.6W	
3739	4822 111 50618	82Ω 10% 0.5W	
3740	4822 051 10391	390Ω 2% 0.25W	
3741	4822 051 10759	75Ω 2% 0.25W	
3742	4822 051 10339	33Ω 2% 0.25W	
3743	4822 051 10472	4k7 2% 0.25W	
3744	4822 051 10109	10Ω 2% 0.25W	
3745	4822 051 10829	82Ω 2% 0.25W	
3746	4822 051 10272	2k7 2% 0.25W	
3747	4822 050 24709	47Ω 1% 0.6W	
3748	4822 050 21009	10Ω 1% 0.6W	
3749	4822 050 21009	10Ω 1% 0.6W	
3750	4822 051 10471	470Ω 2% 0.25W	
3751	4822 051 10689	68Ω 2% 0.25W	
3752	4822 051 10221	220Ω 2% 0.25W	
3753	4822 051 10479	47Ω 2% 0.25W	
3754	4822 116 90834	180Ω 5%	
3755	4822 116 90834	180Ω 5%	
3756	4822 116 90834	180Ω 5%	
3757	4822 051 10471	470Ω 2% 0.25W	
3758	4822 051 10271	270Ω 2% 0.25W	
3759	4822 051 10229	22Ω 2% 0.25W	
3760	4822 051 10122	1k2 2% 0.25W	
3761	4822 051 10223	22k 2% 0.25W	
3762	4822 051 10473	47k 2% 0.25W	
3763	4822 050 23901	390Ω 1% 0.6W	
3764	4822 051 10103	10k 2% 0.25W	
3765	4822 051 10122	1k2 2% 0.25W	
3766	4822 051 10105	1M 5% 0.25W	
3767	4822 050 21504	150k 1% 0.6W	
3768	4822 050 21804	180k 1% 0.6W	
3769	4822 111 50618	82Ω 10% 0.5W	
3770	4822 051 10472	4k7 2% 0.25W	
3771	4822 051 10759	75Ω 2% 0.25W	
3772	4822 051 10339	33Ω 2% 0.25W	
3773	4822 051 10471	470Ω 2% 0.25W	
3774	4822 051 10109	10Ω 2% 0.25W	
3775	4822 051 10272	2k7 2% 0.25W	
3776	4822 051 10479	47Ω 2% 0.25W	
3777	4822 050 24709	47Ω 1% 0.6W	
3778	4822 051 10109	10Ω 2% 0.25W	
3779	4822 051 10391	390Ω 2% 0.25W	
3780	4822 051 10471	470Ω 2% 0.25W	
3781	4822 051 10109	10Ω 2% 0.25W	
3782	4822 051 10689	68Ω 2% 0.25W	
3783	4822 051 10221	220Ω 2% 0.25W	
3784	4822 051 10479	47Ω 2% 0.25W	
3785	4822 116 90834	180Ω 5%	
3786	4822 116 90834	180Ω 5%	
3787	4822 116 90834	180Ω 5%	
3788	4822 051 10229	22Ω 2% 0.25W	
3789	4822 051 10271	270Ω 2% 0.25W	
3790	4822 051 10471	470Ω 2% 0.25W	
3791	4822 051 10223	22k 2% 0.25W	
3792	4822 051 10473	47k 2% 0.25W	
3794	4822 051 10471	470Ω 2% 0.25W	
3795	4822 050 21003	10k 1% 0.6W	
3796	4822 050 21005	1M 1% 0.6W	
3797	4822 050 21504	150k 1% 0.6W	
3798	4822 050 21804	180k 1% 0.6W	
3799	4822 111 50618	82Ω 10% 0.5W	
3800	4822 050 26801	680Ω 1% 0.6W	
3801	4822 050 25601	560Ω 1% 0.6W	
3802	4822 051 10101	100Ω 2% 0.25W	
3803	4822 051 20222	2k2 5% 0.1W	
3804	4822 050 21502	1k5 1% 0.6W	
3805	4822 116 80548	15k 5% 0.5W	
3806	4822 050 11002	1k 1% 0.4W	
3807	4822 051 20222	2k2 5% 0.1W	
3809	5322 116 51882	RES.METAL FILM	
3810	5322 116 51882	RES.METAL FILM	
3811	4822 051 10472	4k7 2% 0.25W	
3812	4822 050 21203	12k 1% 0.6W	
3813	4822 051 10392	3k9 2% 0.25W	
3814	4822 051 10392	3k9 2% 0.25W	
3815	4822 051 10392	3k9 2% 0.25W	
3816	4822 050 24708	4Ω7 1% 0.6W	
3817	5322 116 51882	RES.METAL FILM	
3818	4822 050 21802	1k8 1% 0.6W	
3821	4822 051 10122	1k2 2% 0.25W	
3822	4822 050 24701	470Ω 1% 0.6W	
3824	4822 050 21001	100Ω 1% 0.6W	
3837	4822 051 10154	150k 2% 0.25W	
3838	4822 051 10472	4k7 2% 0.25W	
3841	4822 050 21502	1k5 1% 0.6W	
3842	4822 051 20222	2k2 5% 0.1W	
3843	4822 051 10472	4k7 2% 0.25W	
3844	4822 051 10272	2k7 2% 0.25W	
3845	4822 051 10103	10k 2% 0.25W	
3846	4822 050 24701	470Ω 1% 0.6W	
3848	4822 051 20222	2k2 5% 0.1W	
3849	4822 051 20222	2k2 5% 0.1W	
3851	4822 051 10479	47Ω 2% 0.25W	
3852	4822 051 10479	47Ω 2% 0.25W	
3853	4822 051 10479	47Ω 2% 0.25W	
3854	4822 051 10479	47Ω 2% 0.25W	
3855	4822 051 10102	1k 2% 0.25W	
3861	4822 051 10103	10k 2% 0.25W	
3862	4822 051 10103	10k 2% 0.25W	
3871	4822 116 52289	5k6 5% 0.5W	
3872	4822 051 10105	1M 5% 0.25W	
3874	4822 051 10103	10k 2% 0.25W	
3875	4822 051 10562	5k6 2% 0.25W	

5701	4822 157 63863	3.9µH 10%	
5711	4822 157 71199	10U	
5712	4822 157 63863	3.9µH 10%	
5721	4822 157 71199	10U	
5722	4822 157 63863	3.9µH 10%	
5731	4822 157 71199	10U	
5732	4822 157 63863	3.9µH 10%	
5801	4822 157 63863	3.9µH 10%	
5802	4822 157 53189	COIL	
5803	4822 157 63863	3.9µH 10%	
5804	4822 157 70293	100µH	
5812	4822 157 63863	3.9µH 10%	
5831	4822 157 63863	3.9µH 10%	

6702	4822 130 80877	BAV103	
6711	4822 130 80877	BAV103	
6712	4822 130 80877	BAV103	
6721	4822 130 80877	BAV103	
6722	4822 130 80877	BAV103	
6731	4822 130 30842	BAV21	
6732	4822 130 30842	BAV21	
6801	4822 130 31607	RGP10D	
6802	4822 130 31607	RGP10D	
6803	4822 130 34233	BZX79-C5V1	
6804	4822 130 42489	BYD33G	
6805	4822 130 30861	BZX79-C7V5	
6821	4822 130 80446	BAS32L	
6822	4822 130 80446	BAS32L	
6823	4822 130 30621	1N4148	
6824	4822 130 80446	BAS32L	
6833	4822 130 80446	BAS32L	

7701	4822 209 90118	LM1205N	
7711	4822 130 41594	PH2369	
7712	4822 209 73852	PMBT2369	
7713	4822 130 62279	2SC3953E	
	5322 390 20011	VET SILIC.P4 20GR	
7714	4822 130 41646	BF423	
7715	4822 130 41782	BF422	
7716	4822 130 41594	PH2369	
7717	4822 209 73852	PMBT2369	
7718	4822 209 73852	PMBT2369	
7721	4822 130 41594	PH2369	
7722	4822 209 73852	PMBT2369	
7723	4822 130 62279	2SC3953E	
	5322 390 20011	VET SILIC.P4 20GR	
7724	4822 130 41646	BF423	
7725	4822 130 41782	BF422	
7726	4822 130 41594	PH2369	
7727	4822 209 73852	PMBT2369	
7728	4822 209 73852	PMBT2369	
7731	4822 130 41594	PH2369	
7732	4822 209 73852	PMBT2369	
7733	4822 130 62279	2SC3953E	
7734	4822 130 41646	BF423	
7735	4822 130 41782	BF422	
7736	4822 130 41594	PH2369	
7737	4822 209 73852	PMBT2369	
7738	4822 209 73852	PMBT2369	
7801	5322 130 42136	BC848C	
7831	4822 209 10223	HEF4077BP	
7834	5322 130 42136	BC848C	
7835	4822 130 41594	PH2369	
7841	4822 209 90119	MC141540	
7843	4822 209 33854	M62359P	
7844	4822 209 73852	PMBT2369	

1104 Power down panel

Various

1104	4822 212 31795	POWER DOWN PCB ASSY
	4822 265 41423	10P(M943)
	4822 265 30891	2P(M941)
	4822 265 20563	2P SELECT JUMPER(F946)
	4822 267 31474	2P FEMALE JUMPER
	5322 390 20011	VET SILIC.P4 20GR
	4822 492 71492	SPRING,CLAMPING

2942	4822 121 70547	1.5nF 5% 100V	
2944	4822 126 13496	47pF 105 Y5P 1KV	
2945	4822 124 42145	100µF 20% 25V	
2946	4822 121 70452	3.3nF 5% 100V	
2947	4822 121 70547	1.5nF 5% 100V	
2948	4822 124 42177	47µF 16V	
2949	4822 122 31797	22nF 10% 63V	
2950	4822 124 42145	100µF 20% 25V	
2951	4822 124 42136	10µF 25V	
2952	4822 122 33968	1nF 5% 500V	
2953	4822 124 42172	1000µF 16V	
2954	4822 122 33968	1nF 5% 500V	
2955	4822 124 40198	470µF 20% 16V	
2961	4822 122 32891	68nF 10% 63V	
2962	4822 122 33496	100nF 10% 63V	
2963	4822 124 22669	1µF 20% 50V	
2964	4822 122 33496	100nF 10% 63V	
2965	4822 122 32442	10nF 50V	
2966	4822 126 11456	330nF 10% 63V	
2967	4822 121 43697	330nF 10% 100V	
2968	4822 126 11456	330nF 10% 63V	
2969	4822 122 33496	100nF 10% 63V	
2970	4822 124 41659	4.7µF 20% 25V	
2971	4822 124 41659	4.7µF 20% 25V	

3075	4822 051 10102	1k 2% 0.25W	
3081	4822 051 10472	4k7 2% 0.25W	
3082	4822 051 10103	10k 2% 0.25W	
3083	4822 050 25101	510Ω 1% 0.6W	
3084	4822 050 21008	1Ω 1% 0.6W	
3085	4822 051 10102	1k 2% 0.25W	
3086	4822 051 10102	1k 2% 0.25W	
3087	4822 051 10008	0Ω 5% 0.25W	
3089	4822 051 10561	560Ω 2% 0.25W	
3940	4822 117 11636	470Ω 5% 2W	
3941	4822 050 24302	4k3 1% 0.6W	
3942	4822 050 24302	4k3 1% 0.6W	
3943	4822 050 21005	1M 1% 0.6W	
3944	4822 050 21005	1M 1% 0.6W	
3945	4822 050 29108	9Ω1 1% 0.6W	
3946▲	4822 052 10279	27Ω 5% 0.33W	
3948	4822 116 83973	100Ω 5% 1W	
3949	4822 050 26201	620Ω 1% 0.6W	
3951	4822 116 52207	1k2 5% 0.5W	
3952	4822 050 21542	1k54 1% 0.6W	
3953	4822 050 21005	1M 1% 0.6W	
3954	4822 050 11002	1k 1% 0.4W	
3955	4822 051 10472	4k7 2% 0.25W	
3956	4822 051 10008	0Ω 5% 0.25W	
3957▲	4822 052 10279	27Ω 5% 0.33W	
3958	4822 050 21001	100Ω 1% 0.6W	
3959	4822 051 10103	10k 2% 0.25W	
3961	4822 051 10272	2k7 2% 0.25W	
3962	4822 051 10272	2k7 2% 0.25W	
3963	4822 051 10472	4k7 2% 0.25W	
3964	4822 051 10272	2k7 2% 0.25W	
3965	4822 051 10272	2k7 2% 0.25W	
3966	4822 051 10472	4k7 2% 0.25W	
3967	4822 051 10471	470Ω 2% 0.25W	
3968	4822 051 10224	220k 2% 0.25W	
3969	4822 051 10104	100k 2% 0.25W	
3970	4822 051 10124	120k 2% 0.25W	
3971	4822 051 10203	20k 2% 0.25W	
3972	4822 051 10152	1k5 2% 0.25W	
3973	4822 051 10225	2M2 5% 0.25W	
3974	4822 051 10225	2M2 5% 0.25W	
3975	4822 051 10105	1M 5% 0.25W	
3976	4822 051 10473	47k 2% 0.25W	
3977	4822 051 10473	47k 2% 0.25W	
3978	4822 051 10105	1M 5% 0.25W	
3979	4822 050 24702	4k7 1% 0.6W	
3980	4822 050 24703	47k 1% 0.6W	
3981	4822 051 10561	560Ω 2% 0.25W	
3982	4822 051 10473	47k 2% 0.25W	
3983	4822 050 24702	4k7 1% 0.6W	
3984	4822 051 10473	47k 2% 0.25W	
3985	4822 051 10561	560Ω 2% 0.25W	
3986	4822 051 10473	47k 2% 0.25W	
3987	4822 051 10473	47k 2% 0.25W	
3988	4822 051 10152	1k5 2% 0.25W	
3989	4822 051 10472	4k7 2% 0.25W	
3990	4822 051 10008	0Ω 5% 0.25W	
3991	4822 051 10008	0Ω 5% 0.25W	
3992	4822 051 10008	0Ω 5% 0.25W	
3993	4822 051 10008	0Ω 5% 0.25W	
3994	4822 051 10008	0Ω 5% 0.25W	
3995	4822 051 10008	0Ω 5% 0.25W	
3996	4822 051 10474	470k 2% 0.25W	
3997	4822 051 10008	0Ω 5% 0.25W	
3998	4822 051 10102	1k 2% 0.25W	
3999	4822 051 10242	2k4 2% 0.25W	

5951	8238 274 10460	POWER SAVING TRANSFORMER	

6941	4822 130 31393	RGP10J	
6942	4822 130 31393	RGP10J	
6943	4822 130 34197	BZX79-C12 (COL)	
6944	4822 130 30621	1N4148	
6945	4822 130 30621	1N4148	
6946	4822 130 30621	1N4148	
6948	4822 130 30621	1N4148	
6949	4822 130 31607	RGP10D	
6950	4822 130 34281	BZX79-F15 (COL)	
6951	4822 130 34173	BZX79-C5V6	
6952	4822 130 31607	RGP10D	
6953	4822 130 31607	RGP10D	
6954	4822 130 31607	RGP10D	
6955	4822 130 31607	RGP10D	
6956	4822 130 31607	RGP10D	
6957	4822 130 34174	BZX79-C4V7	
6958	4822 130 34173	BZX79-B5V6	
6959	5322 130 80337	BZV85-C4V7	
6960	4822 130 80446	BAS32L	
6961	4822 130 30621	1N4148	
6962	4822 130 30621	1N4148	
6963	4822 130 80446	BAS32L	
6964	4822 130 80446	BAS32L	
6965	4822 130 80446	BAS32L	
6966	4822 130 80446	BAS32L	
6967	4822 130 30621	1N4148	

7941	5322 130 44918	BUX87	
7942	4822 130 44196	BC548C	
7943	4822 130 41344	BC337-40	
7944	4822 130 41087	BC638	
7945	5322 130 42755	BC847C	
7946	5322 130 42755	BC847C	
7961	4822 130 41594	PH2369	
7962	5322 130 42136	BC848C	
7963	5322 130 42136	BC848C	
7964	5322 130 42136	BC848C	
7965	5322 130 42136	BC848C	
7966	5322 130 42755	BC847C	
7967	5322 130 42136	BC848C	
7968	5322 130 42755	BC847C	
7969	5322 130 42136	BC848C	
7970	4822 209 10265	HEF4070BP	
7971	5322 209 10422	HEF4538BP	
7972	4822 209 10318	HEF40106BP	
7973	5322 130 42136	BC848C	
7974	4822 130 42513	BC858C	
7975	5322 130 42136	BC848C	

7977	5322 130 42755	BC847C	

1105 Terminal panel

Various

1105	4822 212 31919	TERMINAL PCB ASSY	
	4822 265 20707	2P WAFER	
	4822 277 30969	SWITCH,SLIDE	
	4822 267 51145	15P D(F283)	
	4822 267 10281	BNC	
1235	4822 209 90114	INTEGR.CIRCUIT	

2041	4822 124 80106	47µF 20% 16V	
2042	4822 122 31765	100pF 2% 63V	
2043	4822 122 31765	100pF 2% 63V	
2251	4822 122 33496	100nF 10% 63V	
2252	4822 124 80106	47µF 20% 16V	
2253	4822 122 33496	100nF 10% 63V	
2254	4822 124 80106	47µF 20% 16V	
2261	4822 122 33496	100nF 10% 63V	
2262	4822 124 80106	47µF 20% 16V	
2263	4822 122 33496	100nF 10% 63V	
2264	4822 124 80106	47µF 20% 16V	
2271	4822 122 33496	100nF 10% 63V	
2272	4822 124 80106	47µF 20% 16V	
2273	4822 122 33496	100nF 10% 63V	
2274	4822 124 80106	47µF 20% 16V	
2281	4822 122 31971	10pF 2% 63V	
2282	4822 122 31971	10pF 2% 63V	
2283	4822 122 33496	100nF 10% 63V	
2291	4822 124 80106	47µF 20% 16V	
2292	4822 124 80106	47µF 20% 16V	
2293	4822 122 33496	100nF 10% 63V	

3041	4822 050 24701	470Ω 1% 0.6W	
3042	4822 051 10471	470Ω 2% 0.25W	
3043	4822 050 21003	10k 1% 0.6W	
3044	4822 051 10102	1k 2% 0.25W	
3045	4822 051 10472	4k7 2% 0.25W	
3046	4822 050 11002	1k 1% 0.4W	
3047	4822 051 10472	4k7 2% 0.25W	
3048	4822 051 10008	0Ω 5% 0.25W	
3049	4822 051 10151	150Ω 2% 0.25W	
3050	4822 051 10151	150Ω 2% 0.25W	
3251	4822 051 10759	75Ω 2% 0.25W	
3252	4822 050 21001	100Ω 1% 0.6W	
3253	4822 051 10153	15k 2% 0.25W	
3254	4822 051 10472	4k7 2% 0.25W	
3255	4822 051 10153	15k 2% 0.25W	
3256	4822 051 10472	4k7 2% 0.25W	
3257	4822 051 10101	100Ω 2% 0.25W	
3258	4822 051 10759	75Ω 2% 0.25W	
3259	4822 051 10151	150Ω 2% 0.25W	
3260	4822 051 10151	150Ω 2% 0.25W	
3261	4822 051 10759	75Ω 2% 0.25W	
3262	4822 051 10101	100Ω 2% 0.25W	
3263	4822 051 10153	15k 2% 0.25W	
3264	4822 051 10472	4k7 2% 0.25W	
3265	4822 051 10153	15k 2% 0.25W	
3266	4822 051 10472	4k7 2% 0.25W	
3267	4822 051 10101	100Ω 2% 0.25W	
3268	4822 051 10759	75Ω 2% 0.25W	
3269	4822 051 10151	150Ω 2% 0.25W	
3270	4822 051 10008	0Ω 5% 0.25W	
3271	4822 051 10759	75Ω 2% 0.25W	
3272	4822 051 10101	100Ω 2% 0.25W	
3273	4822 051 10153	15k 2% 0.25W	
3274	4822 051 10472	4k7 2% 0.25W	
3275	4822 051 10153	15k 2% 0.25W	
3276	4822 051 10472	4k7 2% 0.25W	
3277	4822 051 10101	100Ω 2% 0.25W	
3278	4822 051 10759	75Ω 2% 0.25W	
3279	4822 051 10008	0Ω 5% 0.25W	
3280	4822 051 10008	0Ω 5% 0.25W	
3281	4822 051 10102	1k 2% 0.25W	
3282	4822 051 10102	1k 2% 0.25W	
3283	4822 051 20222	2k2 5% 0.1W	
3284	4822 051 20222	2k2 5% 0.1W	
3285	4822 051 20222	2k2 5% 0.1W	
3286	4822 051 20222	2k2 5% 0.1W	
3287	4822 051 10334	330k 2% 0.25W	
3288	4822 051 10229	22Ω 2% 0.25W	
3289	4822 051 10331	330Ω 2% 0.25W	
3291	4822 051 10102	1k 2% 0.25W	
3292	4822 051 10472	4k7 2% 0.25W	
3293	4822 051 10102	1k 2% 0.25W	
3294	4822 051 10151	150Ω 2% 0.25W	
3295	5322 116 51882	RES.METAL FILM	
3296	5322 116 51882	RES.METAL FILM	
3297	5322 116 51882	RES.METAL FILM	
3298	5322 116 51882	RES.METAL FILM	
3299	5322 116 51882	RES.METAL FILM	

5251	4822 157 63863	3.9µH 10%	
5252	4822 157 63863	3.9µH 10%	

6041	4822 130 34233	BZX79-C5V1	

7041	4822 209 90072	24LC21	
7042	5322 130 42136	BC848C	
7251	4822 130 41594	PH2369	
7252	4822 130 41594	PH2369	
7261	4822 130 41594	PH2369	
7262	4822 130 41594	PH2369	
7271	4822 130 41594	PH2369	
7272	4822 130 41594	PH2369	
7291	4822 130 60383	BF824	
7292	4822 209 73852	PMBT2369	

1106 MVL panel

Various

1106	4822 212 31793	MVL PCB ASSY	
	4822 265 41473	9P(M011)	

2011	4822 124 22686	10µF 16V	
2012	4822 122 33496	100nF 10% 63V	
2013	4822 122 33496	100nF 10% 63V	
2014	4822 124 22686	10µF 16V	
2015	4822 122 33496	100nF 10% 63V	
2016	4822 122 33496	100nF 10% 63V	
2017	4822 122 33496	100nF 10% 63V	
2018	4822 122 33496	100nF 10% 63V	
2019	4822 122 33496	100nF 10% 63V	
2020	4822 122 33496	100nF 10% 63V	
2021	4822 122 33496	100nF 10% 63V	
2022	4822 122 33496	100nF 10% 63V	
2023	4822 122 33496	100nF 10% 63V	
2024	4822 124 22686	10µF 16V	
2025	4822 124 22686	10µF 16V	
2026	4822 124 22686	10µF 16V	
2027	4822 122 33496	100nF 10% 63V	

3011	4822 051 10471	470Ω 2% 0.25W	
3012	4822 051 10204	200k 2% 0.25W	
3013	4822 117 11645	470Ω 1% 0.125W	
3014	4822 051 54702	4k7 1% 0.125W	
3015	4822 051 10101	100Ω 2% 0.25W	
3016	4822 051 10471	470Ω 2% 0.25W	
3017	4822 051 10204	200k 2% 0.25W	
3018	4822 051 20222	2k2 5% 0.1W	
3021	4822 051 10101	100Ω 2% 0.25W	
3022	4822 051 10471	470Ω 2% 0.25W	
3023	4822 051 10204	200k 2% 0.25W	
3024	4822 051 20222	2k2 5% 0.1W	
3025	4822 051 10101	100Ω 2% 0.25W	
3026	4822 051 10471	470Ω 2% 0.25W	
3027	4822 051 10204	200k 2% 0.25W	
3028	4822 051 20222	2k2 5% 0.1W	

6011	4822 130 80446	BAS32L	
6012	4822 130 80446	BAS32L	
6013	4822 130 80446	BAS32L	
6014	4822 130 80446	BAS32L	

7011	5322 209 85761	LM319N	
7012	5322 209 85761	LM319N	
7013	5322 209 11118	74HCT373N	
7014	5322 209 11268	74HCT164N	
7015	5322 209 11268	74HCT164N	
7016	5322 209 11106	74HCT02N	
7017	5322 209 11106	74HCT02N	
7018	5322 209 11471	74HCT20N	
7019	5322 209 11105	74HCT00N	